From Reiter's Syndrome to Reactive Arthritis: Ethical and Clinical Legacies of Nazism in Rheumatology

Jozélio Freire de Carvalho MD PhD[1] and Yehuda Shoenfeld MD FRCP MaACR[2,3]

[1]Department of Internal Medicine and Diagnostic Support, Medical School, Federal University of Bahia, Salvador, Bahia, Brazil
[2]Zabludowicz Center for Autoimmune Diseases, Sheba Medical Center, Tel Hashomer, Israel
[3]Recanati School of Medicine, Reichman University, Herzliya, Israel

ABSTRACT The Holocaust represents an extreme failure of medical ethics, with physicians actively involved in crimes against humanity. Rheumatology is directly affected through eponyms that honor Nazi perpetrators and through persistent musculoskeletal consequences observed in Holocaust survivors. In this article, we critically analyzed symbolic (nomenclature) and biological (trauma-related disability) legacies of Nazism in rheumatology. Narrative reviews of PubMed/MEDLINE, Scopus, and *Israel Medical Association Journal* (*IMAJ*) as well as key historiographic analyses and clinical studies of musculoskeletal outcomes among Holocaust survivors were included. Ethical codes emerging post-Holocaust (Nuremberg Code and Declaration of Helsinki) were integrated. Renaming Reiter's syndrome as reactive arthritis and Wegener's granulomatosis as granulomatosis with polyangiitis represents ethical correction. Clinical evidence shows Holocaust survivors experience such as reduced functional recovery after hip fracture, lower perceived health despite similar objective measures, and greater cardiovascular burden impairing rehabilitation tolerance. Rheumatology must align nomenclature with ethical responsibility and recognize trauma-associated musculoskeletal vulnerability. Historical memory should guide clinical decisions, language, and education.

IMAJ 2026; 28: 210–212

KEY WORDS: ethics, Holocaust, musculoskeletal health, reactive arthritis, rehabilitation

The Holocaust stands as an unparalleled collapse of medical ethics. Thousands of German physicians were members or collaborators of the Nazi regime, engaging in forced sterilization, racial experimentation, torture, and mass murder in concentration camps. Medicine was weaponized to classify, segregate, and destroy, violating principles foundational to professional identity and human dignity. This profound ethical trauma shapes the duty of contemporary clinicians to uphold memory, responsibility, and justice in every aspect of care.

THE RENAMING OF REITER'S SYNDROME TO REACTIVE ARTHRITIS EXEMPLIFIES HOW ETHICAL VIGILANCE CORRECTS HISTORICAL INJUSTICES IN MEDICAL NOMENCLATURE.

One such dimension is disease nomenclature. Names are not neutral. They represent choices about honor, memory, and legitimacy. When a condition bears the name of a perpetrator of crimes against humanity, the clinical vocabulary conveys unintended glorification and reinforces historical injustice. In rheumatology, the term *Reiter's syndrome*, historically used for the triad conjunctivitis-urethritis-arthritis, carries the legacy of Hans Conrad Julius Reiter, a physician who oversaw and participated in lethal human experimentation under the Nazi system [1-4]. The growing movement to replace this label with the scientifically accurate and ethically neutral term *reactive arthritis* marks a critical evolution in medical integrity. A similar process occurred when *Wegener's granulomatosis* transitioned to *granulomatosis with polyangiitis*, reflecting the need to dissociate clinical terminology from involvement in atrocities [5].

However, the legacy of Nazism in rheumatology extends beyond language. The biological consequences of genocide endure across the lifespan. Holocaust survivors who endured prolonged malnutrition, trauma, infectious exposure, and extreme physical and psychological stress have been shown to age differently from the general population. Studies have demonstrated poorer rehabilitation outcomes following hip fracture [6], discordance between subjective and objective health measures with persistent perception of vulnerability [7], and increased cardiovascular disease burden affecting musculoskeletal performance [8]. Their bodies, like their memories, bear the long lasting scars of violence.

The inheritance of Nazism in rheumatology is dual in nature. It is symbolically encoded in terminology and biolog-

ically expressed in functional impairment among survivors. In this review, we integrated both dimensions to inform ethical, clinical, and educational actions within the specialty.

Methods

This narrative review followed structured steps to ensure the quality and traceability of evidence. A comprehensive search was performed in PubMed/MEDLINE, Scopus, and the *IMAJ* database. Search terms included: *Nazism*, *Holocaust*, *Reiter's syndrome*, *reactive arthritis*, *eponyms*, *survivors*, *frailty*, *musculoskeletal*, *rehabilitation*, and *aging*.

A total of 58 records were identified through the database searches. After screening titles and abstracts, 34 records were excluded due to duplication, lack of relevance to rheumatology or medical ethics, or insufficient documentation. Consequently, 24 full-text articles were retained for qualitative synthesis.

Inclusion criteria were articles documenting the involvement of physicians commemorated in rheumatologic terminology with Nazi crimes, studies assessing musculoskeletal or functional outcomes in Holocaust survivors, and historical sources on bioethics derived from post-Holocaust accountability (Nuremberg Code, Declaration of Helsinki). We included retrospective cohorts, observational studies, historical reviews, and editorials containing primary documentary evidence.

Exclusion criteria involved works not addressing rheumatologic relevance or lacking reliable documentation. Data extracted included population, outcomes, functional measurements, and ethical implications. The multidisciplinary nature of the topic and heterogeneity of methods precluded meta-analysis; therefore, results were synthesized qualitatively.

Results

Historical analyses showed that Hans Conrad Julius Reiter committed grave violations of human rights and was actively associated with the Nazi eugenic apparatus [1-4]. Continued use of his name as an eponym represents implicit commemoration. Rheumatologic consensus therefore recognizes the term *Reiter's syndrome* as inappropriate and promotes the term *reactive arthritis* as both clinically and ethically accurate [1-4]. Similar correction applies to the removal of the name *Wegener* due to documented Nazi affiliations [5], reinforcing that disease names must not exalt individuals linked to atrocities.

Clinical studies reveal long-term effects of trauma relevant to musculoskeletal outcomes. In a large rehabilitation cohort of older adults with hip fracture, Mizrahi and colleagues [6] demonstrated that being a Holocaust survivor independently predicts reduced improvement in functional independence scores at discharge, even after controlling for age and co-morbidities. These results imply that trauma-induced sarcopenia, metabolic disturbances, neuromuscular impairment, and psychological factors continue to affect motor recovery decades later.

HOLOCAUST SURVIVORS SHOW PERSISTENT MUSCULOSKELETAL AND FUNCTIONAL VULNERABILITY, UNDERSCORING THE NEED FOR TRAUMA-INFORMED RHEUMATOLOGIC CARE.

Ohana and co-authors [7] found that survivors reported worse subjective health and functional perception despite comparable objective general health indicators. Because pain and limitation are primarily subjective constructs, this discrepancy holds major implications for rheumatologic care. Survivors may present disproportionate perceived disability, often exacerbated by anxiety, fear-avoidance behavior, survivor guilt, and chronic stress physiology.

In addition, Kagansky et al. [8] showed that survivors display higher cardiovascular burden as older adults, including increased ischemic heart disease prevalence and revascularization procedures. Although cardiovascular health is not traditionally considered a rheumatologic focus, it directly influences functional rehabilitation and tolerance to physical therapy in conditions like osteoarthritis, osteoporosis, chronic back pain, and post-fracture recovery.

RHEUMATOLOGY MUST INTEGRATE ETHICAL MEMORY WITH INTERDISCIPLINARY REHABILITATION TO ENSURE THAT COMPASSION AND JUSTICE REMAIN CENTRAL TO CLINICAL PRACTICE.

Together, these findings confirm that genocide trauma produces lifelong biological vulnerability affecting musculoskeletal health, mobility and recovery potential.

Discussion

In this review, we showed that rheumatology inherits symbolic and biological consequences of Nazism, requiring proactive correction. Disease nomenclature is an ethical instrument. Continued use of eponyms honoring perpetrators normalizes cruelty and contradicts the healing mission of the profession [1-4]. The official removal of the term Reiter's syndrome is aligned with the same ethical principles that inspired the Nuremberg Code and Dec-

laration of Helsinki, foundational documents responding explicitly to abuses committed by physicians during the Holocaust [9,10]. Medical education and editorial policies must therefore include historical literacy as a core component of professional formation.

In this context, Israeli medical literature has played a prominent role in expanding the ethical debate on Nazi-associated medical eponyms beyond rheumatology. Ohry [11] questioned whether eponyms honoring Nazi physicians should continue to be used in medical practice, emphasizing the moral responsibility of physicians and medical institutions to confront historical injustices. Ben David and colleagues [12] further broadened this discussion by examining the appropriateness of changing surgical and obstetric eponyms linked to Nazi doctors, concluding that ethical consistency requires the removal of honorific terminology regardless of medical specialty. Siegler and co-authors reinforced this position, highlighting the collective responsibility of the medical profession in Israel to reassess symbols embedded in clinical language that may perpetuate unethical legacies [13].

Biologically, the long-term impact of genocide visibly influences musculoskeletal aging. Data from rehabilitation cohorts have shown that trauma survivors recover more slowly from injuries [6]. Emotional and cognitive scars manifest in amplified pain, reduced self-efficacy, and lower adherence to exercise [7]. Cardiovascular burden restricts physical tolerance and limits the effectiveness of rehabilitative interventions [8]. For rheumatology, a specialty focused on function, mobility and quality of life, ignoring such determinants undermines clinical outcomes.

Modern humanitarian crises generate new populations with similar trauma exposure including refugees, torture survivors, war victims, and displaced individuals worldwide. Rheumatologists increasingly encounter such patients and must apply trauma-informed models of care integrating functionality, psychosocial support, and interdisciplinary planning.

Thus, remembering the past is not only symbolic. It informs practice, improves care, and protects ethics from erosion. Historical awareness strengthens clinical compassion. By correcting nomenclature and addressing trauma-borne disability, rheumatology honors the dignity violated during the Holocaust and ensures that such ethical failures are neither forgotten nor repeated.

CONCLUSIONS

Rheumatology must integrate ethical memory and functional medicine. Abandoning honorific eponyms such as *Reiter's syndrome* prevents symbolic celebration of perpetrators. Recognizing the lasting musculoskeletal vulnerability of genocide survivors enables more effective, trauma-informed rehabilitation. Together, these actions reinforce ethical vigilance and strengthen the quality and humanity of clinical care.

Correspondence

Dr. J.F. de Carvalho

Dept. of Internal Medicine and Diagnostic Support, Medical School, Federal University of Bahia, Salvador, Bahia 41810-080, Brazil

Phone: (55-71) 9187-1169

Email: jotafc@gmail.com

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