

# Blood and blood component transfusion for Jehovah's Witnesses: a scoping review

Transfusão de sangue e hemocomponentes para as Testemunhas de Jeová: revisão de escopo

Transfusión de sangre y hemocomponentes para los Testigos de Jehová: revisión del alcance

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#### ABSTRACT

**Objective:** to map studies that address non-transfusion of blood and blood components to Jehovah's Witness patients. **Method:** this scoping review used the method proposed by the Joanna Briggs Institute. Twelve Brazilian and international databases were searched in October 2020. No time frame was used. **Results:** of the 1435 articles found in the databases searched, 21 were included in this study. Their contents were summarized into three categories: 1) strategies alternative to the use of blood components; 2) legal approaches to refusal by Jehovah's Witness patients; and 3) bioethical approaches to refusal by Jehovah's Witness patients; and 3) bioethical approaches to refusal by Jehovah's Witness patients. **Conclusion:** this scoping review mapped the literature and identified the concerns and strategies used in care for Jehovah's Witness patients who refuse transfusions of blood and blood products for religious reasons. Understanding these alternatives will be fundamental to guaranteeing safe care and preserving patient autonomy. **Descriptors:** Delivery of Health Care; Bioedthics; Blood Transfusion; Religion; Patient Rights.

#### RESUMO

**Objetivo:** mapear os estudos que abordam a não transfusão de sangue e hemocomponentes ao paciente Testemunha de Jeová. **Método:** revisão de escopo, seguindo o método proposto pelo Instituto Joanna Briggs. Foram realizadas buscas em doze bases de dados nacionais e internacionais, em outubro de 2020. Não foi utilizado recorte temporal. **Resultados:** dos 1435 artigos encontrados nas bases de dados pesquisadas, 21 foram incluídos neste estudo, seus conteúdos foram sintetizados em três categorias: 1) Estratégias alternativas ao uso de hemocomponentes; 2) Abordagem jurídica na recusa do paciente Testemunha de Jeová; 3) Abordagem bioética na recusa do paciente Testemunha de Jeová. **Conclusão:** a presente revisão de escopo permitiu mapear a literatura e conhecer as inquietações e as estratégias usadas na assistência ao paciente TJ que por questões religiosas recusa transfusão de sangue e hemocomponentes. A compreensão dessas alternativas será fundamental para a garantia de uma assistência segura e na preservação da autonomia do indivíduo.

Descritores: Atenção à Saúde; Bioética; Transfusão de Sangue; Religião; Direitos do Paciente.

#### RESUMEN

**Objetivo**: mapear los estudios que abordan la no transfusión de sangre y hemocomponentes a pacientes Testigos de Jehová. **Método**: revisión del alcance, siguiendo el método propuesto por el Instituto Joanna Briggs. Se realizaron búsquedas en doce bases de datos nacionales e internacionales, en octubre de 2020. No se estipuló un recorte temporal. **Resultados:** de los 1435 artículos encontrados en las bases de datos investigadas, 21 fueron incluidos en este estudio, sus contenidos se resumieron en tres categorías: 1) Estrategias alternativas al uso de hemocomponentes; 2) Enfoque legal en cuanto al rechazo del paciente testigo de Jehová; 3) Enfoque bioético del rechazo de un paciente testigo de Jehová. **Conclusión:** esta revisión de alcance permitió mapear la literatura y conocer las preocupaciones y estrategias utilizadas en la atención de los pacientes Testigos de Jehová que, por motivos religiosos, rechazan transfusiones de sangre y hemocomponentes. Comprender estas alternativas será fundamental para garantizar una atención segura y preservar la autonomía del individuo.

Descriptores: Atención a la Salud; Bioética; Transfusión Sanguínea; Religión; Derechos del Paciente.

# INTRODUCTION

Blood transfusions and blood components are extremely important technologies in modern therapy and they save lives when used properly in health problem situations. But, like any therapeutic interventions, they are not free from acute or late complications, the risk of transmitting infectious diseases and other clinical complications<sup>1</sup>.

Although blood transfusion is a common therapy in a hospital routine, it brings with it an ethical dilemma that is difficult to resolve. This occurs when the patient refuses to accept a blood transfusion for religious reasons even in imminent risk of death, as is the case for Jehovah's Witness patients<sup>2</sup>.



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Jehovah's Witness is a religious community made up of more than 8 million adherents distributed in more than 240 countries, made up of different ethnic groups with different cultures and languages. However, they have the same objective in common: to worship Jehovah and follow in the footsteps of Jesus Christ, dedicating time to the preaching work and the teaching of the Bible<sup>3</sup>.

Followers consider it a violation of their dignity to undergo a whole blood transfusion, or any of its four components: red blood cells, white blood cells, platelets and plasma. So, they would be disobeying a law of God contained in his word, the bible. However, its religious understanding does not absolutely prohibit the use of components such as albumin, immunoglobulins and anti-hemophilic preparations, and it is up to each follower to individually decide whether or not to accept it.<sup>4</sup>.

Faced with the need to perform a blood transfusion for a Jehovah's Witness patient, the entire team involved in care is exposed to an ethical dilemma: offering the best therapy according to what the patient needs (beneficence) or respecting the user's right not to receive a treatment (autonomy) which is considered as the best alternative by the professional. Thus, a conflict is established between the patient's beliefs and autonomy, and the duty and responsibility of the health professional to save lives. Furthermore, to give more weight to the impasse, it is necessary to reflect on the need for spiritual care that this individual presents<sup>5</sup>.

The Federal Constitution of Brazil of 1988 guarantees full freedom to Brazilian citizens in article 5. This constitutional guarantee translates into the principle of autonomy of will. By will in the clinical context, it is understood as the patient's option to choose or refuse the proposed therapeutic treatment by clarifying the risks and benefits<sup>6</sup>.

In parallel, the resolution of the Federal Council of Medicine (Resolution CFM no. 2.217/2018) determines that the doctor must adopt all necessary and known measures to preserve the life of the patient in urgent and emergency situations which characterize imminent danger of death, regardless of therapeutic refusal<sup>7</sup>.

However, the Regional Council of Medicine of the State of Rio de Janeiro (CRMERJ) edited Resolution no. 136/99 to regulate the issue of blood transfusion refusal, and says in article 1 that the doctor, aware of the patient's refusal, should not proceed with the administration of blood and its blood components before resorting to all the optional methods of known alternatives which are within their reach<sup>8</sup>.

According to the nursing professional code of ethics, nurses must provide care without discrimination of any kind and the exercise of their profession must be based on law, prudence, respect, solidarity and diversity of opinion and ideological position. Therefore, nurses must provide humanized care, which is not limited to the preservation of the individual's life, but is attentive to all needs, including spiritual ones<sup>9</sup>.

By the nature of nursing's social practice, it offers patient care 24 hours a day and ends up playing an important role in terms of qualified listening. Thus, nurses need to help patients and their families by guiding, informing and clarifying doubts about the risks of their therapeutic decision. To do so, it is necessary that these professionals know how to listen and recognize the physical and emotional demands of this subject<sup>10</sup>. This theme requires permanent discussion guided by the bioethical principles of beneficence, non-maleficence, autonomy, justice and equity. Thus, both legislation and professional practice can protect the patient's autonomy without compromising professional performance<sup>2,11</sup>.

Based on the above, the following review question arises: What is the evidence on the non-transfusion of blood and blood components in Jehovah's Witness patients in health services? Therefore, the objective of this review was to map the studies which address the non-transfusion of blood and blood components in Jehovah's Witness patients.

# METHOD

This is a scoping review study following the method proposed by the Joanna Briggs Institute (JBI)<sup>12</sup>. Before its implementation, a search in the Open Science Framework (OSF) platforms and the JBI's own repository showed that there was no scoping review in progress on this topic. However, the protocol of this review was not published. The review question was based on the acronym Problem, Concept and Context (PCC). In this study, P – Jehovah's Witness Patients; C – Therapy with blood and blood components; and C – Health Services. The study went through the identification stages of the review question; search for relevant studies; selection of articles; extraction of research data and grouping of results.

The study selection met the following inclusion criteria: for the population, studies were included which addressed Jehovah's Witness patients of any gender and over 18 years of age, since this population does not depend on parental authorization to receive or refuse the blood transfusion. Regarding the concept, studies that addressed the issue of





Review Article Artigo de Revisão Artículo de Resvisión

refusal of blood transfusion and blood components by Jehovah's Witness patients were included, while studies which only addressed blood transfusion without reference to the JW community were not accepted. Regarding the context, studies which discussed patients' refusal in any type of health service were included. Articles with any methodological approach, freely available in full, were incorporated. There was no direct contact with authors, so material that was not available on the internet was not included. Neither temporal nor idiomatic cuts were implemented.

The search strategy was carried out in three stages. First step: In order to add keywords, preliminary searches were carried out in two databases: Virtual Health Library (VHL) and US National Library of Medicine National Institutes of Health (PUBMED) based on the elements described in the PCC. The standardized terms and their synonyms in Portuguese, Spanish and English were identified in the controlled vocabularies of Descriptors in Health Sciences (DECS), Medical Subject Headings (MESH) and Embase Subject Headings (Emtree). The terms were arranged with quotation marks to establish the exact expression of the compound term and word order. The Boolean operators OR were used to group synonyms and AND to intersect the terms in the search strategy. This preliminary step sought to check for new terms in the titles, abstracts and indices of the retrieved articles in order to expand the descriptors and keywords used in the final search strategy.

The search strategy used in the Pubmed database was as follows: (("jehovah s witnesses"[MeSH Terms]) OR ("Jehovah's Witnesses"[Title/Abstract] OR "Jehovah Witnesses"[Title/Abstract] OR "Jehovahs Witnesses"[Title/Abstract] OR "Witnesses, Jehovah's"[Title/Abstract] OR "Jehovah witness"[Title/Abstract] OR "Jehovahs witness"[Title/Abstract] OR "Jehovah's witness"[Title/Abstract] OR Jehovah[Title/Abstract])) AND (("treatment refusal"[MeSH Terms]) OR ("Treatment Refusal"[Title/Abstract] OR "Refusal, Treatment"[Title/Abstract] OR "Refusals, Treatment"[Title/Abstract] OR "Treatment Refusals" [Title/Abstract] OR "Patient Refusal of Treatment" [Title/Abstract] OR "Refusal of Treatment"[Title/Abstract] OR "Patient Elopement"[Title/Abstract] OR "Elopement, Patient"[Title/Abstract] OR "Elopements, Patient"[Title/Abstract] OR "Patient Elopements"[Title/Abstract] OR "refusal of care"[Title/Abstract] OR "refusing "Patient Refusal"[Title/Abstract] OR "Refusal medical treatment"[Title/Abstract] OR of patients"[Title/Abstract] OR "patient non-adherence"[Title/Abstract] OR "patient non-compliance"[Title/Abstract] OR "patient nonadherence"[Title/Abstract] OR "patient noncompliance"[Title/Abstract] OR "patient refusal of treatment"[Title/Abstract] OR "patients' non-adherence"[Title/Abstract] OR "patients' non-compliance"[Title/Abstract] OR "patients' nonadherence"[Title/Abstract] OR "patients' noncompliance"[Title/Abstract])). Small adaptations were adopted for the other databases.

Second stage: The research carried out in October 2020 used all the keywords identified, producing a broad mapping which was then conducted in the following databases: in the Regional Portal of the Virtual Health Library (BVS) in its main databases - Latin American and Caribbean Literature on Health Sciences (LILACS), Medline/Pubmed, and the Scientific Electronic Library Online (Scielo); the following databases were used on the Capes Journal Portal: Applied Social Sciences Index & Abstracts - ASSIA (Proquest), Cumulative Index to Nursing and Allied Health Literature – Cinahl, Academic Search Premier; SocINDEX with Full Text (EBSCO), APA PsycInfo (American Psychological Association), Web of Science (Clarivate Analytics), Scopus and Embase (Elsevier). We also searched the Brazilian Digital Library of Theses and Dissertations (BDTD) of the Brazilian Institute of Information in Science and Technology (IBICT) and Science.Gov. to add gray literature documents.

Third step: A manual search was carried out in the reference lists of the selected articles in order to identify relevant studies which might not have been reached by the electronic search in the databases. The entire process of mapping descriptors and keywords for the evidence search strategy, as well as the search itself, were carried out in partnership with a health librarian, as recommended by the JBI.

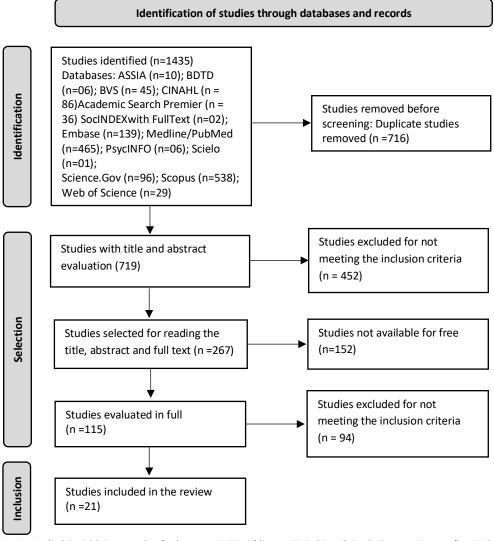
The scoping review followed the process of selecting sources of evidence by the following steps: screening by title, examining the abstract, and finally, evaluating the full text. The selection process was conducted in Rayyan<sup>®</sup> software program from the definition of inclusion and exclusion criteria, which allows to assign reason for exclusion and label for inclusions. The selection of articles was performed by two members of the research team independently, and a third evaluator intervened when they diverged. After reading an article in full, a table was created to detail the included and excluded sources, organizing them from the PRISMA-ScR flowchart<sup>13</sup>.

The data extracted from the mapping from a form previously prepared by the authors included: 1. Authors; 2. Year of publication; 3. Country of the study; 4. Objectives of the study; 5. Method; and 6. Results achieved. The central elements and units of analysis of each article were evaluated from this data extraction, generating a categorization by similarity of the subjects discussed. These categories are presented through a narrative synthesis.



# RESULTS

The flowchart of search and selection of manuscripts is shown in Figure 1.



Assia: Applied Social Sciences Index & Abstracts; BDTD: Biblioteca Digital Brasileira de Teses e Dissertações; BVS: Biblioteca Virtual em Saúde; Cinahl: Cumulative Index to Nursing and Allied Health Literature; SciELO: Scientific Electronic Library Online.

FIGURE 1: Flowchart of the study selection process adapted from PRISMA-ScR. Rio de Janeiro, RJ, Brazil, 2020<sup>13</sup>.

A total of 719 of the 1435 articles found in the searched databases remained after removing duplicate records. After a thorough reading of their titles and abstracts, 604 were discarded and 115 were included. After reading the 115 articles in full, only 21 were selected because they met the inclusion criteria established in the work.

Of the 21 studies included in this review, 10 are a literature review, two guidelines, two case studies, a systematic review, an opinion article, a retrospective review, a quantitative cross-sectional study, a cohort study, a qualitative cross-sectional study, and an inquiry response. All were published from 2005 to 2020 and developed in the following countries: United States (n=6), Brazil (n=4), Spain (n=3), Australia (n=2), Great Britain (n=1), Mexico (n=1), China (n=1), Netherlands (n=1), Norway (n=1) and Japan (n=1). The synthesis obtained is shown in Figures 2 and 3.





Title/Country/Year	Method	Objectives
Ethical and medical-legal aspects in the management of neurosurgical emergencies among Jehovah's Witnesses: Clinical implications and review <sup>14</sup> United States, 2020	Literature review	Review morbidity from operative delays, discuss medicolegal concerns raised, and provide a detailed guide to hemostasis in patients who refuse blood products.
Treatment of acute leukaemia in adult Jehovah's Witnesses <sup>15</sup> United States, 2019	Literature review	Discuss optimal management of the Jehovah's Witness patient diagnosed with leukemia and describe alternative modalities to blood transfusions to provide sufficient oxygenation.
Guidelines on transfusion of red blood cells: Prognosis of patients who decline blood transfusions. <sup>16</sup> Brazil, 2018	Systematic review	Answer if there are parameters, time, clinical signs or situations which indicate that the refusal of a red blood cell transfusion can lead to death or sequelae.
Jehovah 's Witness Administration in Obstetrics and Gynecology: An Understanding, Ethical, and Legal Approach <sup>17</sup> Estados Unidos, 2016	Literature review	Describe the medical, ethical, and legal implications of managing Jehovah's Witness patients in obstetric and gynecological settings.
Autonomy of the patient's will and capacity to consent: a reflection on the irresistible coercion Brazil, 2016 <sup>18</sup>	Literature review	Investigate the validity of the patient's manifestation of will, when he is influenced by pain, suffering and needs to declare whether or not he will undergo a certain treatment.
When the pregnant Jehovah's Witness patient refuses blood: implications for nurses <sup>19</sup> United States, 2010	Case study	Discuss alternative strategies to blood transfusion and the appropriate approach.
Jehovah's Witnesses' positions on the use of hemocomponents and hemoderivatives <sup>20</sup> Brazil, 2010	Qualitative cross- sectional study	Study the degree of knowledge and acceptance of fresh and stored blood components and blood products by Jehovah's Witness patients. Propose tools to face possible ethical and moral conflicts in relationships with doctors and dentists.
Overriding the Jehovah's Witness patient's refusal of blood: a reply to Cahana, Weibel, and Hurst <sup>21</sup> United States, 2009	Inquiry response	Examine the two ethical reasons that were offered to explain respondents' responses and argue that neither are ethically acceptable.
Ethical dilemmas in blood transfusion in Jehovahís Witnesses: A legal-bioethical analysis <sup>22</sup> Brazil, 2008	Literature review	Identify the knowledge production by health professionals about blood transfusion in Jehovah's Witnesses, list the therapeutic alternatives that can be used in these individuals and cite the legal, ethical and biotic system concerning blood transfusion.
A case study of an older adult with severe anemia refusing blood transfusion <sup>23</sup> United States, 2007	Case study	Discuss the diagnosis and treatment of severe anemia in an older adult patient.
The approach to the patient who refuses blood transfusion <sup>24</sup> Mexico, 2006	Literature review	Describe the approach to the patient who refuses blood transfusions.

**FIGURE 2:** Scope - synthesis of articles published in the American continent. Rio de Janeiro, RJ, Brazil, 2020.



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Title/Country/Year	Method	Objectives
Association of Anaesthetists: anaesthesia and peri-operative care for Jehovah's Witnesses and patients who refuse blood <sup>25</sup> Great Britain, 2018	Guidelines	Providing a practical perioperative guide for clinicians treating patients who refuse blood is a useful resource for patients who wish to invoke this right.
Managing Injured Jehovah's Witness Patients Where Blood Transfusion May Not Be An Option: A Retrospective Review <sup>26</sup> Australia, 2018	Retrospective review	Assess the management and outcomes of patients who self- identified as Jehovah's Witnesses with traumatic hemorrhage in a large Australian trauma center.
Caring for pregnant women for whom transfusion is not an option. A national review to assist in patient care <sup>27</sup> Australia, 2016	Literature review	Develop a pragmatic approach to guide clinicians in their clinical practice.
Refusal of Medical Blood Transfusions Among Jehovah's Witnesses: Emotion Regulation of the Dissonance of Saving and Sacrificing Life <sup>28</sup> Norway, 2016	Quantitative cross-sectional study	Understand, not predict or control, how JWs deal with life- and-death dissonance.
Intraoperative Anemia and Single Red Blood Cell Transfusion During Cardiac Surgery: An Assessment of Postoperative Outcome Including Patients Refusing Blood Transfusion <sup>29</sup> Netherlands, 2016	Cohort study	Examine the association between uncorrected hemoglobin levels and selected postoperative outcomes, as well as erythrocyte effects
Management of massive bleeding in a Jehovah's Witness obstetric patient: The overwhelming importance of a pre-established multidisciplinary protocol <sup>30</sup> Spain, 2016	Literature review	To present a protocol for the management of massive postoperative hemorrhages successfully applied to a Jehovah's Witness patient after a cesarean section.
Blood transfusion and Jehovah's Witnesses revisited: Implications for surgeons <sup>31</sup> China, 2012	Literature review	Discuss the background to this conflict, suggested solutions, legal precedents and how authorities can help deal with this difficult dilemma.
Guidelines for the Management of Conscious Objects to Blood Transfusion <sup>32</sup> Japan, 2009	Guidelines	Create guidelines for the management of patients who refuse blood transfusions for religious reasons.
Jehovah's Witnesses refusal of blood: religious, legal and ethical aspects and considerations for anesthetic management <sup>33</sup> Spain, 2006	Literature review	Review the grounds for refusing blood transfusions by Jehovah's Witnesses, as well as the ethical, legal and anesthetic considerations in their treatment.
Evaluation of a guideline for Jehova's Witnesses in a surgical practice <sup>34</sup> Spain, 2005	Opinion article	Create guidelines for the management of patients who refuse blood transfusions for religious reasons.

FIGURE 3: Scope - synthesis of articles published outside the American continent. Rio de Janeiro, RJ, Brazil, 2020.

The extraction and analysis of data enabled identifying three thematic categories: Alternative strategies to the use of blood components; Bioethical approach when there is refusal by a Jehovah's Witness patient; and Legal approach when there is refusal by a Jehovah's Witness patient. The studies floated their discussions by more than one approach, with a synthesis presented in Figures 4 and 5.



Category 1: Alternative strategies to the use of blood components Use hemoglobin-based oxygen carriers <sup>15,17,26</sup> ;	
Administer fibrinogen concentrate <sup>17,19</sup> ;	
Use bloodless volume expanders (crystalloids and colloids) <sup>19,22,24,31</sup> ;	
Use systemic agents to improve hemostasis and the activity of clotting factors: protamine sulfate, vitamin	n K prothromhin
complexes, aprotinin, aminocaproic acid and tranexamic acid; factor VII; Concentrated factor proth	
Cryoprecipitate, desmopressin, conjugated estrogens; clotting factors without albumin; topical hemostatic	
magnesium gluconate; erythropoietin, iron, folic acid, vitamin C and B12 <sup>15-17,19,22-24,26,27,30,31,33</sup> ;	agents, calcium,
Performing a good anamnesis (recognizing risk factors for bleeding or anemia can help clinicians predict/rea	alize the need for
preventive or control measures) <sup>20,24,25,30,31</sup> ;	
Avoid unnecessary blood tests <sup>15,23,24,26,27,31</sup> ;	
Use a pediatric blood collection bottle <sup>15,23,25-27,31</sup> ;	
Perform laboratory tests 6 weeks before surgery to detect and treat iron deficiency <sup>19,25,26,30,31</sup> ;	
Consider discontinuation of anticoagulants and antiplatelet agents <sup>16,17,24,25,27,30,31,33</sup> ;	
Treat any degree of anemia <sup>17,19</sup> ;	
Consult specialists who already have experience in the care of patients without blood transfusion <sup>20,24,26,30</sup> ;	
Pay attention to blood in the stool and use stool softeners <sup>15,23</sup> ;	
Perform gastrointestinal prophylaxis with a proton pump inhibitor <sup>15,26</sup> ;	
Seek information about the patient's beliefs <sup>23</sup> ;	
Promote optimization of the hemoglobin level, diagnosis and correction of hemostasis defects <sup>24,25,27,30</sup> ;	
Avoid myelosuppressive medications <sup>15</sup> ;	
Using peripheral blood stem cell sources over the bone marrow to hasten recording <sup>15</sup> ;	
Do conditioning without total marrow irradiation to avoid mucositis and consider palifermin to reduce mucosit	is <sup>15</sup> ;
Promote the return of any blood discarded from the central venous catheter to a closed system <sup>15</sup> ;	
Delay transplantation until platelet count is optimized <sup>15</sup> ;	
Eliminate menstruation <sup>15</sup> ;	
Use cardiopulmonary bypass <sup>19,23-25</sup> ;	
Use acute normovolemic hemodilution <sup>22,4,26,30</sup> ;	
Promote intraoperative cell recovery <sup>16,17,19,22,24,25,30,31,33</sup> ;	
Promote Extracorporeal Membrane Oxygenation (ECMO) <sup>25,26,33</sup> ;	
Promote controlled hypotension <sup>24-26,31,33</sup> ;	
Apply hemostasis tests (thromboelastometry) <sup>16</sup> ;	
Use a meticulous surgical technique (regional anesthesia, adequate intraoperative positioning) <sup>16,24,26,30,31,33</sup> ;	
Use fibrin gel, platelet gel, platelet-rich plasma, glue and/or fibrin sealant, bandages - hemostats containing	plasma fractions
thrombin sealants <sup>24</sup> ;	
Make radionuclide labeling for localization of bleeding <sup>24</sup> ;	
Perform therapeutic hypothermia (32°C-33°C) <sup>26,31</sup> ;	
Promote maintenance of normothermia <sup>24</sup> ;	
Promote hyperbaric oxygen therapy <sup>31</sup> ;	
Constantly update the healthcare team on the management of blood products <sup>31</sup> ;	
Promote surgical techniques and hemostatic instruments (electrocautery, lasers or the argon-ray coagula	ator, prophylactic
angiographic embolization, pneumatic tourniquet) <sup>19,26,33</sup> ;	
Minimize oxygen consumption (sedation, analgesia and mechanical ventilation) <sup>33</sup> ;	
Optimize cardiac output with the use of inotropic drugs <sup>33</sup> ;	
Use epidural blood patch <sup>22</sup> ;	raomotrino on
Administer medications to retain uterine atony (IV oxytocin, IV carbetocin, intramuscular methyle intramyometrial tromethamine) <sup>30</sup> :	ingometrine, and
intramyometrial tromethamine) <sup>30</sup> ; Promote collection for target CD34+ cell dose of > 10 7/cell and use peripheral blood stem cell sources over	r hong marrow to
accelerate engraftment <sup>15</sup> ;	
Provide supplemental oxygen therapy and correct coagulation abnormalities <sup>15</sup> ;	
	the 1st visit bloor
Identify and document pregnant patients for whom (for whatever reason) blood transfusion is not an option at products that are acceptable; care model that will be offered; plan to optimize hemoglobin during pregnancy <sup>15,</sup> <b>GURE 4:</b> Synthesis of the strategies used in the approach to Jehovah's Witness patients: category 1. Rio de Janeiro, RJ, Brazil,	,27;

	thical approach when there is refusal by a Jehovah's Witness patient
	ssional can refer the patient to another professional if they do not feel comfortable treating the patient <sup>24,31</sup> ;
•	the perception of how the recommendations made affect the patient's values <sup>18</sup> ;
	ion on the possibilities of interventions and medical recommendations <sup>18,30</sup> ; Jehovah's Witness
•	e patient about the benefits and risks of treatment <sup>18</sup> ;
Create a good pro desires and wishe	ofessional-patient relationship, creating an environment for dialogue in order to understand the patient's belief 25 <sup>17,18,20,24</sup> ;
Respect the patie	ent's autonomy <sup>14,16-,18,20,23,25,27,28,30,31,33</sup> ;
Do not stereotyp	e the patient <sup>17</sup> ;
Treat each patier	nt individually, respecting the particularity of each individual <sup>17,28</sup> ;
Avoid assuming t accept a blood tra	hat the patient's blood refusal means they are choosing death or asking the patient questions such as: "will yo ansfusion?" <sup>24</sup> ;
•	e communication with the patient throughout the care in order to take advantage of opportunities to as
	r to clarify the patient's wishes and provide guidance on preventive measures <sup>17</sup> ;
	ent's will when they are unconscious or incapable <sup>34</sup> ;
Be ethically prep	ared in order to identify ethical and/or moral conflicts in the professional-patient relationship <sup>34</sup> ;
Contact the ethic	s committee if the hospital has this service <sup>15,20,24</sup> ;
Ensure patient co	onfidentiality in case they decide to accept blood <sup>24</sup> ;
Make contingend	y plans in advance <sup>24</sup> ;
Respect the patie	ent's advance directives in an emergency <sup>30,31</sup> ;
Evaluate moral d	uties and obligations according to their professional code of ethics <sup>14</sup> ;
Establish clear pr	otocols in order to not delay necessary surgeries <sup>14</sup> ;
Respect patients	convictions and beliefs and refrain from imposing your own convictions on them <sup>33</sup> ;
Category 3: Lega	l approach when there is refusal by a Jehovah's Witness patient
	successive conversation in the patient's chart and the care provided <sup>17,24,27,30</sup> ;
	nsent before any surgical procedure <sup>15,16,22,23,26,27,30-34</sup> ;
Advise the patier	nt that a refusal of treatment must be recorded in writing and can be made in advance through a document of
prior instructions	(advance directives) <sup>15,27,28,30,32-34</sup> ;
Respect the patie	ent's right protected by law to refuse blood transfusion <sup>33</sup> ;
Respect, recogni	ze and carry out actions that ensure the patient's right recommended by COFEN Resolution No. 311/200
(specific for Nursi	ng professionals) <sup>22</sup> ;
Not implementir	ng or participating in healthcare without the consent of the person or their legal representative, except i
imminent risk of	death <sup>22</sup> .

### DISCUSSION

Followers of the Jehovah's Witness community have been criticized for refusing blood transfusions for decades. However, with advances in bloodless surgery and the development of alternatives to transfusion, there has been an increased focus on managing patients who establish refusal. Their autonomy and consent for medical treatments have been discussed in both the ethical and legal fields<sup>18,25</sup>.

Most of the studies analyzed addressed alternative strategies to blood transfusion, showing that health professionals are seeking new approaches to treatments which were previously only possible through blood transfusion. This is very positive to guide the care provided to both Jehovah's Witness patients and patients who, for another reason, also do not accept blood-based treatments. Thus, as evidenced by the studies analyzed, the rejection of blood products is not only restricted to the religions in question<sup>16,17,19,22,24,25,33,31,33</sup>.

Many authors assure that alternative strategies are simple, safe and effective as they involve a series of pharmacological and non-pharmacological technologies to minimize or abdicate the need for a blood transfusion through good anesthetic and surgical management, thus reducing blood loss. A simple, low-cost method that can be used by nurses is to perform a good anamnesis in order to recognize risk factors for bleeding or anemia, which can help predict the need for preventive or control measures<sup>20,24,25, 30,31</sup>.

Another intervention often cited by the authors is the use of bloodless volume expanders (crystalloids and colloids), but more advanced technologies such as cardiopulmonary bypass, extracorporeal membrane oxygenation (ECMO), and controlled hypotension (among others) can also be used. It is worth highlighting the importance of the multidisciplinary team working together, providing humanized and comprehensive care, in addition to providing opportunities for the exchange of interprofessional knowledge in order to improve the care results<sup>15,16,19,21,22,24,26,30,31,33,35,</sup>





It was evident in the findings that all the authors studied agree that there is in fact an ethical dilemma when a JW patient does not accept to be transfused. Therefore, the professional-patient relationship imposes an ethical duty on the health professional to act in the best interests of the patient, however the limit of beneficence is the patient's autonomy, although the professional is committed to doing good, they cannot decide in place of the patient what is best for them<sup>14,6-18,20,2123,28,30,31</sup>.

Given the above, the bioethical preparation of professionals who provide care to these patients is very important, as therapeutic rejection of blood is an individual point of view, a manifestation of right, autonomy and free will that is provided for by law. Despite blood refusal, professionals need to maintain good communication and a good relationship with the patient, which some authors describe as the key to obtaining the best possible result in a difficult situation<sup>17,18,20,24</sup>. However, if the health professional does not feel comfortable providing care to a Jehovah's Witness patient, they can refer the patient to another professional, which is ethically acceptable<sup>24,31</sup>.

Taking into account the bibliographic materials analyzed and their results, it was evident the importance of Jehovah's Witness patients having documents which legally validate their therapeutic refusal (advance directives) in case they become unconscious<sup>15,17,27,28,30,32-34</sup>. In this sense, the record is of fundamental importance to support the professional, being advised by the authors to document each successive conversation in the patient's chart and the care provided, with it being important to describe which treatments are acceptable or not by the patient<sup>17,24,25,2730</sup>.

In order to legally support professionals to act safely and perhaps not to have to criminally answer for acts contrary to their codes of ethics and the laws in force in their countries, it is of paramount importance to obtain the consent and signature of the patient for any procedure, including surgical<sup>15-18,24-26,30,31,32-34</sup>.

Thus, valuing the patient's will integrates a logic of respect for developing their personal autonomy, their body, their health and their life with values based on the principle of human dignity. In this context, the issue of non-transfusion of blood by the patient should not be taken to the courts, as the situation transcends the legal issue and it is not up to the law to say what is ethical or determine which fundamental right should prevail in this situation<sup>18,33</sup>.

### **Study limitations**

Since contact was not established with the authors of studies not available on the internet, some important reference may have been excluded from this review, configuring as a limitation of this study.

## CONCLUSION

This scoping review allowed us to map the studies that address the issue of blood transfusion and blood components of Jehovah's Witness patients, thereby allowing us to know the concerns, needs and challenges experienced by health professionals when dealing with denial of blood transfusion by these patients.

The discussion on the subject does not end in itself, and research on clinical decision-making in the context of nontransfusion of blood and blood components is still little explored given the complexity of the process and the deep ethical dilemma. Despite this, ways to mitigate existing conflicts are evidenced in the literature and provide support for more resolute care, with preservation of patient autonomy and respect for morality and conscientious objection of the health team.

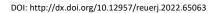
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