



ENGLEWOOD HEALTH

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Statement

To Whom It May Concern:

I am the Emeritus Chair, Department of Anesthesiology, Critical Care Medicine, Pain Management and Hyperbaric Medicine at Englewood Health (www.EnglewoodHealth.org) in New Jersey, USA, and board certified in internal medicine, critical care, anesthesiology, and hyperbaric medicine. I have more than 40 years of experience as a physician caring for critically ill and surgical patients. In addition, I am one of the founding members of the Society for the Advancement of Patient Blood Management (SABM) (www.sabm.org), the Network for the Advancement of Patient Blood Management, Haemostasis and Thrombosis (NATA) (www.nataonline.com), and the Society of Critical Care Anesthesiologists.

I have been involved in clinical care, research, and medical education throughout my professional career. My academic appointments include the following: Courtesy Clinical Professor, University of Florida College of Medicine; Adjunct Clinical Professor of Anesthesiology, Medicine and Surgery, Icahn School of Medicine at Mount Sinai, New York; and Clinical Professor of Anesthesiology, Rutgers New Jersey Medical School. I lecture to medical audiences nationally and internationally on a variety of topics related to anesthesiology, critical care medicine, and patient blood management. I have more than 200 peer-reviewed publications that have appeared in prestigious international medical journals as well as several books and book chapters. My work has been published in leading scholarly journals such as *The New England Journal of Medicine*, *The Lancet*, *JAMA*, *Anesthesiology*, *Critical Care Medicine*, *Pediatric Critical Care Medicine*, *British Journal of Anesthesia*, *Blood*, and *Transfusion*. I have served on the editorial board of the *Transfusion* journal, *Journal of Thoracic Disease and Contagion*, and as the supplement editor for the *Journal of Cardiothoracic and Vascular Anesthesia*. I also serve as the editor on the topic of blood conservation for UpToDate, a leading evidence-based clinical resource for physicians. I am a Fellow of the American College of Critical Care Medicine and the American College of Chest Physicians. I hold membership in other professional organizations, including the American Society of Anesthesiologists (ASA) and the Association for the Advancement of Blood & Biotherapies (AABB). In 1997, I was recognized in *Time* magazine as one of America's "Heroes of Medicine."

As the medical director of the Englewood Health Bloodless Medicine and Surgery (BMS) Department, I have had the privilege of caring for hundreds of patients who decline blood transfusion for personal or religious reasons. The majority of these individuals have been Jehovah's Witnesses (JW), but non-Witness patients also request bloodless (medical care using treatment strategies that preempt banked blood transfusion) to avoid the risks and complications of transfusion. Moreover, in patients for whom crossmatch-compatible blood is not available, use of bloodless medical treatment strategies is lifesaving. Our BMS program was organized and incorporated in 1992 and we have successfully treated all types of medical ailments and surgical diseases using therapeutic

strategies that obviated the use of any allogeneic (banked) blood. Our patient population has ranged from pediatric patients to those of very advanced age. Our services include obstetric care, including high-risk pregnancies, gynecologic oncology, as well as complex cardiac and vascular surgery.

The clinical outcomes in the population of patients who declined allogeneic blood transfusion were so positive that we adopted these clinical pathways for all patients. This resulted in health benefits to all patients and a substantial reduction in blood component use. Although our medical center does not perform organ transplantation (e.g., kidney, liver, heart, lung), we have identified other centers who not only performed these complex procedures but were skilled at providing these interventions without any allogeneic blood. With the passage of time, an increasing number of major centers began to provide the full spectrum of care to JW patients with great success. Those institutions, like ours, who provide the full spectrum of medical and surgical care to all patients for whom blood transfusion is not an option, have quickly recognized the positive effect of BMS on patient outcomes and the substantial reduction in medical resource use due mostly to the significant reduction of blood use.

Despite the rapid advances in BMS over the past two to three decades, including the adoption of BMS strategies by prestigious university-affiliated adult and pediatric hospitals worldwide, some clinicians still think that it is challenging to care for patients who decline blood transfusions. This is due either to clinician inexperience or to a failure to approach clinical care with an open mind. In addition, those with an open mind have found that the JW community is not only well informed about medical issues, specifically about their individual ailments, but they are always seeking the most advanced and best clinical care available as long as it is without allogeneic blood transfusions. Medical staff have often noted that in conversing with any one of our BMS patients, they are always respectful, cooperative, and they diligently adhere to medical directions and recommendations.

Caring for the JW patient population has afforded medical institutions an opportunity to evaluate the clinical outcomes and safety of BMS. Such positive experiences have helped to overcome some of the medical community's misconceptions about bloodless medical and surgical care. I view my experience as a gratifying privilege. Experience with BMS has expanded the horizons of many clinicians. This includes biomedical ethics, understanding the relationships within JW families when it comes to end of life decisions, and the medical management of newborns and infants. To state that JW parents desire to secure the best care for their child/children is an understatement. Any added challenge that JW patients may sometimes present to the clinician by requesting the use of therapeutic strategies that preempt blood transfusion in adults and children is not a sign of carelessness or medical neglect. Rather, it is based on the knowledge that virtually all procedures, including those for pediatric patients, can be successfully performed without allogeneic blood transfusions. In caring for children in circumstances where blood loss is unexpectedly large despite aggressive efforts to prevent and control hemorrhage, good communication with parents in advance of the procedure is essential to ensure that parents understand our legal obligations. Nonetheless, we make every effort to optimize the medical status of such patients before treatment and follow well-planned and evidence-based clinical strategies to minimize blood loss and manage anemia.

There is no substitute for respectful communication between the medical team and the parents of a child. It is crucial to establish a shared understanding of the goals of care as well as to assure Witness parents that every effort will be made to respect their wishes. However, if the life of a child is at risk, clinicians are obligated to do everything at their disposal to save that child and that might include blood transfusion, but such circumstances are rare. An honest discussion that aligns the care goals of both parties not only shows respect for parental wishes and decisions, but strengthens parental confidence in the medical team's ability and determination to do the best that they can.

With the understanding that culture and beliefs can have a profound impact on patients' behavior, cognition, and emotions, my colleagues and I respect the deeply held convictions of JW patients regarding allogeneic blood transfusion regardless of their age, just as we respect the rights of patients from many other cultures and beliefs.

In conclusion, my several decades of experience in caring for JW patients and their families has been the most rewarding experience of my medical career. It has promoted professional growth, and enhanced my ability to care for other patients with special medical needs. The needs of JW patients have also led to advancements in science and the publication of thousands of medical studies on the diagnosis and treatment of anemia, management of coagulation, and the function and shortcomings of banked (stored) blood. There is considerable scientific evidence that blood transfusions can be preempted by implementing a multidisciplinary, multimodality, and systematic approach to care and by optimal use of multiple strategies to manage anemia and minimize blood loss. In 2021, the World Health Organization (WHO) published a policy brief urging all member nations to encourage clinicians and hospitals to make wider use of strategies that conserve and manage patients' own blood.

A large number of medical studies confirm that patients treated using BMS strategies, both adults and children, often do as well as, if not better than, patients treated with reliance of allogeneic blood transfusion therapy. Use of such strategies is also associated with significant cost savings to the health care system. This is because the best blood for patients is the blood already circulating in their own bodies, and the management and conservation of this precious resource must be a priority in order to achieve better clinical outcomes and improve patient safety.

Sincerely,

A handwritten signature in black ink, appearing to read "Aryeh Shander". The signature is fluid and cursive, with a large initial "A" and a stylized "S" at the end.

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