



**Kerman University
of Medical Sciences**

School of Management and Medical Information

In Partial Fulfillment of the Requirements for The Degree Msc

Title:

**Investigating the Hemovigilance Process by Using the Six Sigma Approach in
Afzalipour Hospital and providing solution**

By:

Fatemeh Molaahmadi

Supervisor:

Mohammad Hossein Mehrolhassani, PHD

Advisors:

Rohaneh Rahimisadegh

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سازی درخواست توسط بانک خون، ارسال درخواست از بانک خون به سازمان انتقال خون، تزریق خون و فرآورده های خونی در بخش و خون و فرآورده های خونی برگشتی به بانک خون و امحا بودند. بیشترین خطا در زیرفرآیند ارسال درخواست از بانک خون به سازمان انتقال خون با سطح سیگما ۱/۵، در شیفت های عصر و شب با سطح سیگما ۱/۸۷۵ و در لیبل بالینی با سطح سیگما ۱/۸۷۵ و در مرحله پیش تحلیلی مشاهده گردید و سطح سیگمای کلی فرآیند مراقبت از خون برابر با ۲ بود. علل بیشتر خطاهای رخ داده، سهل انگاری و عدم دانش کافی پرسنل بود و راهکار پیشنهادی آموزش مداوم پرسنل ارائه گردید.

بحث و نتیجه گیری: سطح کیفیت فرآیند مراقبت از خون پایین بود لذا با بهره گیری از روش شش سیگما توانستیم خطاهای این فرآیند را شناسایی و در جهت رفع آن ها راهکارهای لازم را ارائه کنیم.

کلمات کلیدی: فرآیند مراقبت از خون، شش سیگما، بهبود کیفیت، بیمارستان، ایمنی بیمار، خطاهای انتقال خون

Background and Objectives: One of the most important processes in the medical diagnosis laboratory is the hemovigilance process. The hemovigilance system is considered a key element in patient safety, which monitors the health of blood and its products and includes the entire blood transfusion chain. The present study aimed to investigate the hemovigilance process quality by using the Six Sigma approach in Afzalipour Hospital and providing solutions.

Methods: The current study, was a sequential combined study of explanatory type that was conducted in the period of September 2022 to December 2021 using the six sigma model in three phases of define, measure and analysis. In the define phase, at first the national guidelines of the hemovigilance system were examined, and then the hemovigilance process in the hospital was directly observed and four semi-structured interviews were conducted to collect the information and complete the observations, then the scoping review with the aim of obtaining evidence, documentation and guidelines related to the hemovigilance process in Iran and Other countries done. In the measure phase, the process of hemovigilance using stratified quota sampling method for 477 hospitalized patients who need to receive blood or blood products in different departments of Afzalipour Hospital in three shifts morning, evening and night through The data sheet was analyzed and then the quality of the hemovigilance process was measured using the six sigma scales . In the analysis phase, the causes of errors and solutions in the hemovigilance process were determined and analyzed by holding a focused group discussion meeting.