

Maryam Vosoughian

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Photo



Education

Date of Birth: April 30, 1966

Place of Birth: Tehran, Iran

Marital Status: Married, with two children

Degree: Specialist in Anesthesiology

Education:

- **M.D. (Doctor of Medicine):** Shahid Beheshti University of Medical Sciences, 1985–1992
- **Residency in Anesthesiology:** Shahid Beheshti University of Medical Sciences, 1992–1995

Faculty Appointments

Faculty Membership – Shahid Beheshti University of Medical Sciences: 1997–Present

Academic and Executive Appointments

Work Experience & Administrative Positions:

1. **Residency (Social Service Period) – Shahed University:** Hazrat Zeinab (S) Hospital, 1996–1997
2. **Residency (Social Service Period) – Shahid Beheshti University of Medical Sciences:** Ayatollah Taleghani Hospital, 1997–1998
3. **Faculty Member – Shahid Beheshti University of Medical Sciences:** Department of Anesthesiology, Ayatollah Taleghani Hospital, 1998–Present
4. **Vice Chair for Education – Department of Anesthesiology:** Ayatollah Taleghani Hospital, 1999–2005
5. **Head of ICU Department:** Ayatollah Taleghani Hospital, 2005–2007
6. **Vice Dean for Education – Hospital Administration:** Ayatollah Taleghani Hospital, 2005–2007
7. **Vice Chair for Research – Department of Anesthesiology:** Shahid Beheshti University of Medical Sciences, 2008–2011
8. **Anesthesiology for Liver Transplant Surgery:** Ayatollah Taleghani Hospital, 2008–Present
(Pioneered liver transplant anesthesia as the first such program at Shahid Beheshti University of Medical Sciences)
9. **Vice Chair for Education – Department of Anesthesiology:** Shahid Beheshti University of Medical Sciences, 2013–2019
10. **Vice Chair for Research – Department of Anesthesiology:** Shahid Beheshti University of Medical Sciences, 2021–2024

Membership and Professional Appointments

Academic Promotions:

- **Promotion to Associate Professor:** 2013
- **Promotion to Full Professor:** 2025

Teaching Positions

Advanced Surgical Anesthesia: Extensive experience in managing complex anesthesia for Vascular, Orthopedic, and Obstetric & Gynecological (OB/GYN) surgeries.

Regional Anesthesia: Highly skilled in performing a wide range of peripheral nerve blocks to optimize post-operative pain management and enhance patient recovery (ERAS).

Painless Labor & Obstetric Anesthesia: Expert in various techniques of labor analgesia, including epidural, combined spinal-epidural (CSE), and patient-controlled epidural analgesia (PCEA). Pioneered the first Painless Labor program at my university as the lead instructor, establishing clinical protocols and training subsequent teams.

Pioneering Roles: I am honored to have been the first Instructor for Painless Labor (Epidural for Labor) and the first Anesthesiologist for the Liver Transplant Program at my university, establishing protocols and training subsequent teams.

Academic Leadership: Proven track record in educational administration, including Vice Chair for Education (1999–2005, 2013–2019), Vice Chair for Research (2008–2011, 2021–2024), and Vice Dean for Education (2005–2007), with extensive experience in faculty development and curriculum design.

Research & Innovation: Active involvement in AI and machine learning applications in anesthesiology, including prediction of hypotension, postoperative cognitive dysfunction, and resident examination outcomes.

Research Expertise across Anesthesiology Subspecialties: Extensive experience in conducting clinical research across various fields of anesthesiology, including obstetric anesthesia, regional anesthesia, critical care, liver transplant anesthesia, postoperative pain management, and perioperative medicine. Skilled in study design, data analysis, and publishing in peer-reviewed journals.

Pain Research: Active research portfolio in acute and chronic pain management, including pharmacological interventions (e.g., dexmedetomidine, ginger, bupivacaine-fentanyl combinations), multimodal analgesia strategies, and patient outcomes following gynecological and obstetric surgeries

Published Books and Book Chapters

Publications & Translations:

1. **Book Translation (English to Persian):**
Vosoughian, M. – Massachusetts Handbook of Anesthesia
Hayan Publications, Tehran, 2007
2. **Book Translation (English to Persian):**
Anesthesia and Co-existing Disease – 2014
3. **Book Chapter (Author):**
Patient Safety – Chapter in Fundamentals of Anesthesia and Critical Care
Arteen-e-Teb Publications, Tehran, 2024
4. Comprehensive Collection of Specialty Questions in Anesthesiology and Critical Care(**Author**) – Volume 7, 2018–2019

Scholarly Publications

1. [Comparison of the Effects of Sevoflurane and Isoflurane During Liver Transplant Surgery on the Short-Term Cardiac, Hepatic, and Renal Outcome: A Randomized Clinical Trial](#)
2. [Effects of Preanhepatic Glucose-Insulin Infusion on Metabolic and Hemodynamic Outcomes in Liver Transplantation: A Randomized Clinical Trial](#)
3. [Experimental implementation of the peripheral nerve block clinical registry: an observational study](#)
4. [Machine Learning-based Prediction of Hypotension During Anesthesia Induction](#)
5. [Factors Influencing the Rejection of Neuraxial Analgesia for Childbirth by Pregnant Women: A Cross-Sectional Study at a Single Medical Center](#)
6. [Is It Still Prohibited to Perform Spinal Anesthesia in Patients with Advanced Heart Disease?](#)
7. [A Mini-review on the Necessity of Expanding Personalized Medicine for the Future of Various Aspects of Pain Management](#)
8. [Promoting a Patient Safety Culture in Anesthesia Practice](#)

9. [The effect of oral clonidine premedication on blood loss in primary total hip arthroplasty: A randomized placebo-controlled trial](#)
10. [Anesthesia experience, clinical characteristics and outcomes of COVID positive childbirths during COVID-19 pandemic: an observational study at two teaching hospitals in Iran](#)
11. [Digoxin for Atrial Fibrillation in Spinal Anesthesia](#)
12. [The effect of different doses of neostigmine plus metoclopramide on the gastric residual volume in patients under enteral nutrition in intensive care unit](#)
13. [Non-punitive Approach in Patient Safety Program](#)
14. [Spinal Anesthesia Management in a 30-Year-Old Patient with Progeria Syndrome: A Case Report](#)
15. [Smart Drug Delivery in Anesthesia: A Need or an Option?](#)
16. [Biosensors Are a Vital Tool in the Optimization of Anesthesia](#)
17. [The Mortality Rate in COVID-19 Patients Undergoing Anesthesia for Surgical Procedures](#)
18. [Midwives' Attitudes to Painless Delivery: An Observational Study](#)
19. [Effect of Vitamin C Infusion on Cerebral Oximetry During General Anesthesia for Carotid Endarterectomy in Diabetic Patients](#)
20. [Evaluation of Oxygen Saturation as an Indicator for Tracheal Intubation in Patients With COVID-19: A Prospective Cohort Study](#)
21. [The role of entrustable professional activities in competency-based medical education for anesthesiology residents: a pilot phase](#)
22. [Regenerative medicine and perioperative hypoxic organ damage: targeting hypoxia-inducible factors](#)
23. [Low-Dose Propofol for the Treatment of Severe Postpartum Post-Dural Puncture Headache: A Case Report](#)

24. [Residency education reform program in department of anesthesiology and critical care: an academic reform model](#)
25. [Effects of general anesthesia versus spinal anesthesia on serum cytokine release after cesarean section: a randomized clinical trial](#)
26. [The effect of repeated direct observation of procedural skills \(R-DOPS\) assessment method on the clinical skills of anesthesiology residents](#)
27. [The Effect of Propofol Anesthesia on the Pain Severity and Frequency of Migraine Attacks in Patients with Chronic Migraine Headache over a Six Month Follow Up: An Observational ...](#)
28. [Pain management of painless labor in a university affiliated hospital: An observational study](#)
29. [Attitudes of the third-year clinical anesthesiology residents toward an independent clinical practice rotation in COVID-19 pandemic in Iran](#)
30. [Evaluation of one-day multiple-choice question workshop for anesthesiology faculty members](#)
31. [Anesthetic Management of a Parturient with Spinal Muscle Atrophy for Cesarean Section: A Case Report](#)
32. [A single-center report on liver transplantation: first experiences from Shahid Beheshti University of Medical Sciences](#)
33. [Attitudes of anesthesiology residents toward a small group blended learning class](#)
34. [Supplemental oxygen therapy and non-invasive ventilation in corona virus disease \(COVID-19\)](#)
35. [Effect of bupivacaine and combination with dexmedetomidine and dexamethasone on mice neural apoptosis](#)
36. [Improving the training process of anesthesiology residents through the mentorship-based approach](#)
37. [Is tele-education a proper substitute for regular method to train anesthesiology residents?](#)

38. [The First Report of Liver Transplantation Program at Shahid Beheshti University of Medical Sciences](#)
39. [Effect of Spinal and General Anesthesia on Serum Cytokine Levels Following Cesarean Section in Preeclampsia](#)
40. [Epidural Anesthesia with Lidocaine and Dexmedetomidine, Versus Lidocaine Alone on Plasma Levels of IL-6 in Patients with Proximal Femoral Fracture](#)
41. [Comparison of two methods of bolus and infusion of tranexamic acid in reduction of blood loss in total knee arthroplasty](#)
42. [Case Report: Rh-Incompatibility-Induced Delayed Hemolytic Transfusion Reaction: Role of Immunologic Reactions in RH-Incompatibility](#)
43. [Comparing the efficacy and safety of dexmedetomidine-lidocaine and propofol-fentanyl-midazolam combinations during endoscopic retrograde cholangiopancreatography](#)
44. [A comparison of prophylactic use of meperidine, meperidine plus dexamethasone, and ketamine plus midazolam for preventing of shivering during spinal anesthesia: a randomized ...](#)
45. [The Effect of Different Combination Doses of Intrathecal Hyperbaric Bupivacaine 0.5% and Sufentanil on the Hemodynamic Profile of Geriatric Patients Undergoing Hip Surgery ...](#)
46. [Intravenous Acetaminophen Effect on Postoperative Narcotic Analgesic Demand after Elective Cesarean Section](#)
47. [Effect of intravenous patient controlled ketamine analgesia on postoperative pain in opium abusers](#)
48. [Mismatched blood transfusion; case-report](#)
49. [INTRAVENOUS KETAMINE COMPARED WITH DICLOFENAC SUPPOSITORY IN SUPPRESSING ACUTE POSTOPERATIVE PAIN IN WOMEN UNDERGOING OBSTETRIC LAPAROSCOPY](#)
50. [The duration of spinal anesthesia with 5% lidocaine in chronic opium abusers compared with nonabusers](#)
51. [Duration of spinal anesthesia with bupivacaine in chronic opium abusers undergoing lower extremity orthopedic surgery](#)

52. [DURATION OF SPINAL ANESTHESIA WITH LOCAL ANESTHETIC DRUGS IN CHRONIC OPIUM ABUSERS COMPARED WITH NON-ABUSERS](#)

53. [A case report of a systematic error in blood transfusion](#)

Case Report

Original Persian Titles & English Translations:

54. بروز خارش پس از تجویز فنتانیل درون نخاعی: یک مطالعه مقطعی.
Prevalence of Pruritus Following Intrathecal Fentanyl Administration: A Cross-Sectional Study
55. مدیریت درد زایمان در یک بیمارستان دانشگاهی: یک مطالعه توصیفی.
Labor Pain Management in a University Hospital: A Descriptive Study
56. پژوهنده، فروردین و - بررسی تاثیر مایع درمانی وریدی بر عوارض بعد از اعمال جراحی سرپایی اردیبهشت ۸۲
The Effect of Intravenous Fluid Therapy on Complications Following Outpatient Surgery – Pajoohandeh Journal, March–April 2003
57. آنالیز گازهای خون مویرگی شریانی شده در بیماران هیپوکسیک بستری در بخش مراقبت های ویژه
Analysis of Arterialized Capillary Blood Gases in Hypoxic Patients Admitted to the Intensive Care Unit
58. اثر زنجبیل بر تهوع و استفراغ پس از عمل در زنان نازای تحت جراحی ژنیکولوژی
The Effect of Ginger on Postoperative Nausea and Vomiting in Nulliparous Women Undergoing Gynecological Surgery
59. بروز حمله حاد آسم به دنبال تزریق اشتباه آتراکوریوم داخل فضای نخاعی: معرفی مورد
Acute Asthma Attack Following Inadvertent Intrathecal Injection of Atracurium: A Case Report
60. بررسی تاثیر راه اندازی زود هنگام بر روی شدت سردرد در دوره حاد پس از عمل در بیماران تحت سزارین الکتیو با بیهوشی اسپینال
The Effect of Early Mobilization on the Severity of Headache in the Acute Postoperative Period in Patients Undergoing Elective Cesarean Section under Spinal Anesthesia
61. بررسی میزان آگاهی بیماران کاندید عمل جراحی غیر اورژانس از بی حسی داخل نخاعی و عوارض آن در بیماران بستری
Assessment of Awareness Regarding Spinal Anesthesia and Its Complications in Patients Candidates for Elective Surgery
62. بررسی نتایج کشت و آنتی بیوگرام ادرار بیماران دارای کاتتر ادراری بستری در بخش مراقبت های ویژه بیمارستان طالقانی تهران
Evaluation of Urine Culture and Antibiotic Sensitivity Results in Patients with Indwelling Urinary Catheters Admitted to the Intensive Care Unit of Taleghani Hospital, Tehran

بررسی اثر دگزامتومتیدین در درد حاد بعد از عمل جراحی ژنیکولوژی نازایی به روش لاپاروسکوپی. 63.
*The Effect of Dexmedetomidine on Acute Postoperative Pain in Infertility Patients
Undergoing Laparoscopic Gynecological Surgery*

Recent Research Projects

1- Investigating the Effect of Reducing Bupivacaine Dose and Adding Fentanyl in Spinal Anesthesia on Stress Responses Following Elective Cesarean Section

بررسی اثر کاهش دوز بوپیواکاین و افزودن فنتانیل در بیحسی نخاعی بر پاسخ های استرسی بعد از جراحی سزارین انتخابی

2- Application of Artificial Intelligence for Prediction of Hypotension Following Spinal Anesthesia in Cesarean Delivery

توسعه مدل های پیش بینی مبتنی بر هوش مصنوعی برای شناسایی بیماران در معرض خطر افت فشار خون ناشی از بیحسی نخاعی

3- Evaluating the Efficacy of Machine Learning Methods in Predicting Hypotension After Induction of General Anesthesia:

پیش بینی افت فشارخون پس از القاء بیهوشی عمومی بررسی کارایی روش های یادگیری ماشین در مقایسه الگوریتم های مختلف یادگیری ماشین برای پیش بینی زود هنگام افت فشار خون پس از القای بیهوشی

4- Prediction of Postoperative Cognitive Dysfunction Using Structural Brain Magnetic Resonance Imaging:

پیش بینی بروز اختلال شناختی پس از جراحی با استفاده از تصویربرداری رزونانس مغناطیسی ساختاری مغز

5- Evaluating Success Patterns and Predicting Outcomes of Specialty Board Examinations and Annual Promotion Exams of Anesthesiology Residents Using Machine Learning and Artificial Intelligence Algorithms

بررسی الگوی موفقیت و پیش بینی نتایج آزمون های ورود تخصصی و ارتقای سالیانه دستیاران تخصصی گروه بیهوشی با استفاده از الگوریتم های یادگیری ماشین و هوش مصنوعی

Organized Workshops

- **DOPS (Direct Observation of Procedural Skills) Workshop** – Training on structured assessment of procedural competencies
- **OSCE (Objective Structured Clinical Examination) Workshop** – Training on designing and implementing clinical examinations
- **Mini-CEX (Mini-Clinical Evaluation Exercise) Workshop** – Training on focused clinical skills assessment
- **MCQ (Multiple Choice Questions) Design Workshop** – Training on psychometric test design and analysis
- **Scientific and Professional Ethics in Medicine Workshop** – Training on medical ethics and professional conduct
- **Artificial Intelligence and Its Applications in Research Workshop** – Training on AI fundamentals, machine learning algorithms, and their practical applications in medical research, including predictive modeling and data analysis