Academic and Professional Resume – Dr. Eghbal Zandkarimi



Biography

Dr. **Eghbal Zandkarimi** is an Assistant Professor in the Department of Epidemiology and Biostatistics at Kurdistan University of Medical Sciences.

He specializes in survival data modeling, count data analysis, and the application of machine learning methods in medical research.

Personal Information

Full Name: Eghbal Zandkarimi

Academic Rank: Assistant Professor, Department of Epidemiology and Biostatistics **Affiliation:** Kurdistan University of Medical Sciences, School of Medicine, Department of

Epidemiology and Biostatistics **Email:** eghbal1363@gmail.com

Educational Background

Ph.D. in Biostatistics, Hamadan University of Medical Sciences, 2019, GPA: 19.27

Thesis: Robust estimation in the joint modeling of correlated zero-inflated Poisson and survival

Supervisor: Dr. Abbas Moghimbeigi

M.Sc. in Biostatistics, Kermanshah University of Medical Sciences, 2013, GPA: 18.27

Thesis: Comparison of multilayer perceptron artificial neural network and logistic regression in

determining risk factors for type 2 diabetes

Supervisor: Dr. Mansour Rezaei

Executive Experiences

- 1. Head of the Office of Talented and Olympiad Students, Kurdistan University of Medical Sciences
- 2. Deputy Director of the Education Development Center (EDC), Kurdistan University of Medical Sciences

Scientific Publications (ISI & Scopus Indexed)

- 1. Zandkarimi, E., & Moghimbeigi, A. (2021). Robust inference in the joint modeling of multilevel zero-inflated Poisson and Cox models. Statistics in Medicine.
- 2. Zandkarimi, E., & Moghimbeigi, A. (2019). Robust inference in the multilevel zero-inflated negative binomial model. **Journal of Applied Statistics.**
- 3. Zandkarimi, E., et al. (2020). The prognostic factors affecting the survival of Kurdistan Province COVID-19 patients: A cross-sectional study. International Journal of Health Policy and Management (IJHPM).
- 4. Zandkarimi, E., et al. (2020). *Prevalence of common nosocomial infections and evaluation of antibiotic resistance patterns*. **Infection and Drug Resistance (Dovepress).**
- 5. Zandkarimi, E., et al. (2021). Assessing the factors affecting cesarean section selection using multilevel count models with excess zeros. **Iranian Journal of Public Health.**
- 6. Zandkarimi, E., et al. (2021). Factors affecting the recovery of Kurdistan province COVID-19 patients: A cross-sectional study. **Epidemiologic Methods.**
- 7. Zandkarimi, E. (2013). Comparison of artificial neural network, logistic regression, and discriminant analysis efficiency in determining risk factors of type 2 diabetes. World Applied Sciences Journal.
- 8. Zandkarimi, E. (2013). Comparison of artificial neural networks and Cox regression models in prediction of kidney transplant survival. International Journal of Advanced Biological and Biomedical Research.
- 9. Zandkarimi, E. (2016). Comparison of performance of ANN wrapper and logistic regression in determining type 2 diabetes risk factors. **Koomesh Journal.**
- 10. Zandkarimi, E., et al. (2025). Robust inference to parameter estimates in the zero-inflated generalized Poisson: The risk factors affecting the fertility rate. Journal of Biostatistics and Epidemiology (JBE).

Research Projects

- Prediction of emergency department visits at Kowsar Hospital, Sanandaj using machine learning models *Principal Investigator*
- Robust estimation in the joint modeling of correlated zero-inflated Poisson and survival data *Ph.D. Dissertation*
- Factors affecting survival of COVID-19 patients in Kurdistan Province Principal Investigator
- Design of a diagnostic software for acute appendicitis using artificial neural networks –
 Principal Investigator

Teaching Experience

Taught at Kurdistan, Hamadan, and Kermanshah Universities of Medical Sciences:

- Biostatistics
- Research Methodology

Workshops and Educational Activities

- Workshop on "R Programming and Its Application in Medical Sciences" for faculty members, Kurdistan University of Medical Sciences (May 2023)
- Lecture on "Artificial Intelligence and Its Applications in Medical Sciences" (May 2025)
- Workshop on "Psychometric Evaluation of Measurement Tools" for faculty members, Kurdistan University of Medical Sciences (September 2025)

Honors and Awards

• Selected as the **Top Student** at Kermanshah University of Medical Sciences (2012)

Areas of Expertise

- Modeling of count and survival data (Poisson, Cox, ZIP, ZINB)
- Big Data analysis
- Artificial Neural Networks (ANN)
- Time Series Modeling

Technical Skills

- Programming Languages: R, Python
- Statistical Software: SPSS, Excel, MINITAB