

## **Curriculum Vitae**

Zahra Shayan

Ph.D of Biostatistics

Associate Professor

Medical School

Department of Biostatistics

Shiraz University of Medical Sciences

Shiraz, Iran

E-mail: [Shayanz@sums.ac.ir](mailto:Shayanz@sums.ac.ir)

## **Publications:**

1. M Askarian, E Taherifard, F Jazzabi, **Z Shayan**, O Assadian, G Groot, et al (2024). Epidemiological and clinical characteristics of long COVID-19 among Iranians: A community-based study in southern Iran. BMC Public Health. 24 (1).2007.
2. SA Hashemi, S Nosrati, **Z Shayan**, AR Vosoughi (2024). Morphological Variations and Normal Parameters of the Cross-Sectional Anatomy of the Tibiofibular Syndesmotoc. Foot and Ankle Specialist 17(2):125-130.
3. M Askarian, AAR Kazerooni, **Z Shayan** (2023). Investigating the tendency to use COVID-19 vaccine booster dose in Iran. BMC Health Services Research. 23(1).
4. AR Vosoughi, E Afaridi, S Solooki, **Z Shayan**, S Rammelt (2023). Prevalence and Predictors of Peroneal Tendon Instability Accompanying Calcaneal Fractures. Foot and Ankle International. 44(9):825-833.
5. AR Vosoughi, E Afaridi, S Solooki, **Z Shayan**, S Rammelt (2023). The Performance of Health Systems: An Assessment Framework and Comparison of Developed and Developing Countries. Journal of Health Sciences and Surveillance System. 11(2):342-350.
6. Ariaifar A, Sanati A, Ahmadvand S, Shekarkhar G, Safaei A, **Shayan Z**, et al (2022). Prognostic significance of immunoscore related markers in bladder cancer. BMC urology 22 (1), 1-9
7. Vosoughi AR, Hashemipour B, Khademi S, Akbarzadeh A, **Shayan Z** (2022). Clinical Outcomes Following Suturing of Sheath of Peroneal Tendons to the Calcaneal Plate as an Innovative Technique for Reduction of Peroneal Tendon Instability Accompanying Calcaneal Fracture. Foot & Ankle Specialist, 19386400221125373
8. Fard HA, Mahmudi-Azer S, Yaqoob QA, Sabetian G, Iranpour P, **Shayan Z**, et al (2022). Comparison of chest CT scan findings between COVID-19 and pulmonary contusion in trauma patients based on RSNA criteria: Established novel criteria for trauma victims. Chinese Journal of Traumatology 25 (03), 170-176
9. Danaei M, McLaws ML, **Shayan Z**, Momeni M, Aminnia S, Yaghout Y, et al (2022). Knowledge, Attitudes, and Practice Toward Isolation Precautions Amongst Nurses and Auxiliary Nurses in Nemazee Hospital, Shiraz, Iran. Shiraz E-Medical Journal 23 (2)
10. Askarian M, Fu L, Taghrir MH, Borazjani R, **Shayan Z**, et al (2022). COVID-19 vaccination acceptance in Iran, a nationwide survey on factors associated with the willingness toward getting vaccinated. International Journal of Preventive Medicine 13 (1), 130
11. Askarian M, Semenov A, Llopis F, Rubulotta F, Dragovac G, Pshenichnaya N, Ojan Assadian O, Ruch Y, **Shayan Z**, et al (2022). The COVID-19 vaccination acceptance/hesitancy rate and its determinants among healthcare workers of 91 Countries: A multicenter cross-sectional study. EXCLI journal 21, 93
12. Ebrahimi V, Bagheri Z, Shayan Z, Jafari P (2021). A Machine Learning Approach to Assess Differential Item Functioning in Psychometric Questionnaires Using the

- Elastic Net Regularized Ordinal Logistic Regression in Small Sample Size Groups. BioMed Research International; Volume 2021 | Article ID 6854477
13. **Shayan Z**, Paydar SH, Maghsoudi F, Akerdi AT, Shayan L (2021). Use of Penalized Count Regression to Determine Factors Affecting the Length of Stay of Trauma Patients in the Intensive Care Unit. Iranian Red Crescent Medical Journal 23 (11).
  14. Hashemi SA, Nosrati S, **Shayan Z**, Vosoughi AR (2021). Morphological Variations and Normal Parameters of the Cross-Sectional Anatomy of the Tibiofibular Syndesmotom. Foot & Ankle Specialist, 19386400211055274
  15. Akbarialiabad H, Zarifsanaiey N, Taghrir MH, Roushenas S, Panahandeh SM, Abdolrahimzadeh-fard H, **Shayan Z**, Kavousi SH, Paydar SH (2021). The impact of flipped learning in surgical education: A mixed-method study. Knowledge Management & E-Learning: An International Journal 13 (3), 273-289
  16. Abdolrahimzadeh Fard H, Borazjani R, Sabetian G, **Shayan Z**, et al (2021). Establishment of a novel triage system for SARS-CoV-2 among trauma victims in trauma centers with limited facilities. Trauma Surgery & Acute Care Open; 6(1).
  17. Taheri Akardi A, Fattahi MM, Ghahremani Z, Paydar SH, **Shayan Z** (2021). Investigation of the Effect of Bioptron Light in Preventing the Formation of Scars in Diabetic and Non-Diabetic Mice. Armaghane danesh; 25 (1).
  18. Shiraly R, **Shayan Z**, McLaws ML (2020). Face touching in the time of COVID-19 in Shiraz, Iran. American journal of infection control; 48 (12).
  19. Askarian M, Sherafat SM, Ghodsi M, Shayan Z, Palenik CH, Hatam N, Yavor Enchev Y (2020). Prevalence of non-reporting of hospital medical errors in the Islamic Republic of Iran. Eastern Mediterranean Health Journal; 26 (11).
  20. Nematolahi S, Nazari S, **Shayan Z**, Ayatollahi SMT, Amanati A (2020). Improved Kaplan-Meier Estimator in Survival Analysis Based on Partially Rank-Ordered Set Samples. Computational and Mathematical Methods in Medicine.
  21. **Shayan Z**, Ebrahimi V, Ezzatzadegan Jahromi Sh (2020). Factors Associated With Short-Term and Long-Term Survival in Patients Undergoing Hemodialysis Using Semi-Parametric Mixture Cure Models. Iranian Journal of Kidney Diseases. Vol(14), Number 1.
  22. Vosoughi AR, **Shayan Z**, Salehi E, Mojtahed Jaberia F, Solooki S, Kardeh B (2020). Agreement between Sanders classification of intraarticular calcaneal fractures and assessment during the surgery. Foot and Ankle Surgery 26:94–97.
  23. Gheibi Z, **Shayan Z\***, Joulaei H, Fararouei M, Beheshti Sh, Shokoohi M (2019). Determinants of AIDS and non-AIDS related mortality among people living with HIV in Shiraz, southern Iran: a 20-year retrospective follow-up study. BMC Infectious Diseases, 19:1094.
  24. Rafiei M, Mezerji NMG, **Shayan Z\***, Mosayebi Gh (2019). The accuracy of white blood cell count in the diagnosis of acute appendicitis using age-sex-adjusted receiver operating characteristic approach Medical Journal of the Islamic Republic of Iran. 33:139.
  25. Mousavi-Roknabadi R, Ershadi F, Hadi N, Roozbeh Shahroodi J, **Shayan Z**, Keshavarz S, et al (2019). Effect of Renal Transplantation on Health-Related

- Quality of Life in Patients with End-Stage Renal Disease; A Quasi-Experimental Study. *Nephro-Urol Mon.* 11(2):e79497.
26. Ghanbari S, Zare N, **Shayan Z** (2018). A Practical Method Based On Functional Data Analysis And Single Exponential Smoothing To Combine Survival Curves In Meta-Analysis: A Simulation Study. *Advances and Applications in Statistics*, 53 (2), 179-197
  27. Mezerji MN, Naseri P, Omraninezhad Z, **Shayan Z\*** (2017). The Reliability and Validity of the Persian Version of Pittsburgh Sleep Quality Index in Iranian People. *Avicenna Journal of Neuropsychophysiology.* 4(3); 95-102.
  28. Habibi D, Rafiei M, Chehrei A, **Shayan Z\***, Tafaqodi S (2018). Comparison of Survival Models for Analyzing Prognostic Factors in Gastric Cancer Patients. *Asian Pacific Journal of Cancer Prevention*, 19(3): 749-753.
  29. Paydar SH, Dalfardi B, **Shayan Z**, Shayan L, Saem J, Bolandparvaz SH (2018). Early Predictive Factors of Hypofibrinogenemia in Acute Trauma Patients. *Journal of Emergencies, Trauma, and Shock*, 11(1): 38-41.
  30. Ghorbani M, Ghaem H, Rezaianzadeh A, **Shayan Z**, Zand F, Nikandish R (2018). Predictive factors associated with mortality and discharge in intensive care units. *Electronic Physician*, 10 (3): 6540-6547.
  31. Khoshmohabat H, Makarem AR, Yasin Karami MY, ... **Shayan Z** (2017). The Efficacy of Surgicel Compared with Simple Gauze Packing in Grade IV Liver Laceration; A New Hope for Trauma Patients: An Experimental Study. *Journal of Trauma & Treatment*, 6(3).
  32. Karami MY, Niakan H, Zadebagheri N, Mardani P, **Shayan Z**, Deilami B (2017). Which One is Better? Comparison of the Acute Inflammatory Response, Raja Isteri Pengiran Anak Saleha Appendicitis and Alvarado Scoring Systems. *Annals of Coloproctology*, 33(6):227-231.
  33. Ghorbani M, Ghaem H, Rezaianzadeh A, **Shayan Z**, Zand F, Nikandish R (2017). A study on the efficacy of APACHE-IV for predicting mortality and length of stay in an intensive care unit in Iran. *F1000Research*, 6.
  34. Mohammad Gholi Mezerji N, Naseri P, Rafeie M, Omraninezhad Z, **Shayan Z\*** (2017). The Reliability and Validity of the Persian Version of Pittsburgh Sleep Quality Index in Iranian People. *Avicenna Journal of Neuro psycho physiology* 4(3):95-102.
  35. Shirali R, **Shayan Z**, Keshtkar V, Hamed M (2017). Self-reported factors associated with engagement in moderate to vigorous physical activity among elderly people: A population-based study. *International Journal of Preventive Medicine* 2017, 8: 26.
  36. **Shayan Z**, Mohammad Gholi Mezerji N, Shayan L, Naseri P (2016). Prediction of Depression in Cancer Patients with Different Classification Criteria, Linear Discriminant Analysis versus Logistic Regression. *Global Journal of Health Science*; 8(7): 41-46.
  37. **Shayan Z**, Pourmovahed Z, Najafipour F, Abdoli AM, Mohebpour F, Najafipour S (2015). Factor structure of the General Health Questionnaire-28 (GHQ-28) from

- infertile women attending the Yazd Research and Clinical Center for Infertility. *International Journal of Reproductive Biomedicine*, 13(12): 801-808.
38. Mohammad Gholi Mezerji N, Rafeie M, **Shayan Z**, Mosayebi GH (2015). The Diagnostic Value of Surface Markers in Acute Appendicitis; A Diagnostic Accuracy Study. *Bulletin of Emergency Trauma*, 3(2):65-69.
  39. **Shayan Z**, Shahkolahi Z, Ahmadlo N, Vafae L, Shayan L (2014). Prognostic Factors of Depression in Patients with Cancer Undergoing Chemotherapy and Radiotherapy. *Health Scope*, 3(4): e18609.
  40. Zekavat OR, Makarem AR, **Shayan Z**, Shojae M (2014). Obesity and overweight among primary school children in Iran. *Minerva Pediatrica*, 66(6): 579-84.
  41. **Shayan Z**, Ayatollahi SMT, Zare N, Moradi F (2014). Prognostic factors of first birth interval using the parametric survival models. *Iranian Journal of Reproductive Medicine*, Vol. 12. No. 2. pp: 125-130.
  42. **Shayan Z**, Ayatollahi SMT, Zare N (2011): A parametric method for cumulative incidence modeling with a new four-parameter log-logistic distribution. *Theoretical Biology and Medical Modelling*, 8(43):1-11.
  43. Ayatollahi SMT, **Shayan Z** (2008). New Reference Values for Mid-Upper Arm Circumference of Shiraz (Iran) primary school children. *The European e-Journal of Clinical Nutrition and Metabolism*, 3, e72-e77.
  44. **Shayan Z**, Shayan F (2007). Pattern of drug prescription in clinical ward of Motahari and Peimanie hospital in 2006. *Journal of Jahrom Medical*, 5(5): 44-50 (In Persian).
  45. Mazharinia N, Aghaei S, **Shayan Z** (2007). Dermatology Life Quality Index (DLQI) scores in burn victims after revival. *Journal of Burn & care Research*, 28(2):312-317.
  46. Rahiminejad M, Saleh A, Jandaghi Amirabadi Y, **Shayan Z** (2007). Evaluation of serum level of testosterone, dehydropiandrosterone sulphate (DHEA-S) prolactin, luteinizing hormone (LH) follicle stimulating hormone (FSH) in women with hirsutism. *Journal of Jahrom Medical*, 5(5): 7-14 (Persian).
  47. Ayatollahi SMT, **Shayan Z** (2006). Head Circumference Standard for School Children of Shiraz, Iran. *Journal of Tropical of pediatric*, 52(6):406-10:406-410.
  48. Ayatollahi SMT, Pourahmad P, **Shayan Z** (2006). Trend in physical growth among children in southern Iran, 1988-2003. *Annals of human biology*, 33(4):510-514.
  49. Ayatollahi SMT, Pourahmad P, **Shayan Z** (2006). Secular Trend in growth among school children of Shiraz (Southern Iran) born in the reconstruction period. *Medical journal of Islamic Republic of Iran*, 20(3):141.

## Membership in professional associations and societies

Women's health bulletin (Journal)

Bulletin of emergency and trauma (Journal)

Trauma research center

## **Teaching**

1. Postgraduate (Biostatistics), Title of lesson: Survival, Statistical methods in epidemiology, Multivariate, Biostatistics, Experimental design (phd).
2. Resident (School of Medicine), Title of lesson: Biostatistics
3. Postgraduate (School of Nursing), Title of lesson: Biostatistics
4. Undergraduate (School of Nursing, School of Management, School of Medicine), Title of lesson: Biostatistics
5. Undergraduate ( Jahrom Medicine University), Title of lesson: Biostatistics
6. Undergraduate ( Lar School of Nursing), Title of lesson: Biostatistics

## **Workshop**

1. Types of Variable and Sampling Methods
2. Data gathering and Analysis
3. Biostatistics and Working with SPSS Software
4. Experimental design
5. Sample size and calculation of power in NCSS software

## **Presentations**

1. 8<sup>th</sup> Iranian Statistical Conference. " Statistical models for estimate children head circumference". Shiraz University, August 22-24 2006.
2. The first national conference on mathematics and statistics, "Diagnostic accuracy of white blood cell count in the diagnosis of acute appendicitis using age-gender-adjusted receiver operating characteristic approach". 16 February 2017, Shiraz , Iran.

## **Research interest:**

Survival – Competing Risks