

## Curriculum Vitae

**Mozhgan Assadat Seif**

### **PERSONAL DATA:**

Nationality: Iranian

Date & Place of birth: 1987, Jahrom, Iran

Gender: Female

Address: Department of Epidemiology, School of Health, Shiraz  
University of Medical Sciences, Shiraz, Iran

Phone Number: +98-713-7251001      Ext: 247 (work)

E.mail: m\_seif@sums.ac.ir

### **PRESENT POSITION**

Assistant Professor of Biostatistics, Department of Epidemiology, School of Health, Shiraz University of Medical Sciences (SUMS), Shiraz, Iran.

Non-Communicable Disease Research Center, Department of Epidemiology, School of Health, Shiraz University of Medical Sciences (SUMS), Shiraz, Iran.

Ethics Committee of Health and Nutrition Schools

In charge of the faculty advisors of school of Health

Vice President of Education and Graduate Studies of the Department of Epidemiology

## ACADEMIC QUALIFICATIONS

BSc in Statistics

September, 2009

Department of Statistics, School of Sciences, Shiraz University, Shiraz, Iran

MSc in Biostatistics

February, 2012

Department of Biostatistics, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran

*Thesis Title:* Power Analysis of Multivariate Regression Using Monte Carlo simulation and its application in the analysis of KIDSCREEN-27 in healthy children and children with ADHD

PhD in Biostatistics

September, 2016

Department of Biostatistics, School of Health, Hamadan University of Medical Sciences, Hamadan, Iran

*Thesis Title:* Cure Mixture Model and Recursive Partitioning in Chronic Diseases

## HONORS

- ✓ Top student award among master student of biostatistics, Shiraz University of Medical Sciences, 2012
- ✓ Top student among all postgraduates students, Shiraz University of Medical Sciences, 2012
- ✓ Top rank student in comprehensive exam, Hamadan University of Medical Sciences, 2013

## TEACHING EXPERIENCES (from 2012 up to now)

- ✓ Biostatistics
- ✓ Analytical statistics
- ✓ Biostatistics and research method

- ✓ Survival Analysis
- ✓ Categorical data analysis
- ✓ Application of statistical methods in environmental health
- ✓ Applied statistics by computer
- ✓ Statistical methods

### **WORKSHOPS PRESENTED**

- ✓ Survival data analysis (SUMS; 2016)
- ✓ Generalized Linear Models (SUMS; 2016)
- ✓ Introductory coding with R (SUMS; 2018)
- ✓ The application of SPSS software (SUMS; 2018)
- ✓ Scientific Writing (SUMS; 2019)

### **WORKSHOPS ATTENDED**

- ✓ Understanding Bayesian Analysis Using JAGS & STAN Software (UMSHA; 2015)
- ✓ Introduction to programming with R software (SUMS; 2010)
- ✓ protein and nucleic acid Bioinformatics (SBMU; 2012)
- ✓ The 4th Bioinformatics Conference of Iran (2012)
- ✓ Sampling method and calculation of sample size (SUMS)
- ✓ Introduction to Research Methodology and Epidemiological Studies (SUMS; 2011)
- ✓ Scientific Writing (UMSHA; 2013)
- ✓ LISREL (SU; 2017)
- ✓ Size Estimation (SUMS; 2017)
- ✓ MAXQDA (SU; 2017)
- ✓ Artificial Neural Networks (UMSHA; 2014)
- ✓ structural equation modelling (UMSHA; 2014)
- ✓ Exploratory Factor Analysis (UMSHA; 2014)
- ✓ Confirmatory Factor Analysis (UMSHA; 2014)
- ✓ Advanced SPSS workshop (SUMS; 2012)
- ✓ Systematic Review and Meta-Analysis (UMSHA; 2015)
- ✓ Chemoinformatics (SUMS; 2018)

## RESEARCH AREA

Statistical machine learning, Model based Recursive Partitioning, Random & Conditional Forests, Classifications & Regression Trees, Survival analysis, Mixture cure models, Multivariate Analysis, Big data analysis, Support Vector Machines, Artificial Neural Network

## MEMBERSHIPS

- ✓ Iranian Statistical Society (**ISS**)
- ✓ Consulting and computer Research Center
- ✓ Chief Executive Officer of the Futurists of Pars Statistics Company

## PUBLISHED PAPERS IN JOURNALS:

- ✓ A Comparison between Cure Model and recursive partitioning: a retrospective cohort study of Iranian female with breast cancer  
Computational and mathematical methods in medicine; 2016
- ✓ Model-based Recursive Partitioning for Survival of Iranian Female Breast Cancer Patients: Comparing with Parametric Survival Models  
Iranian journal of public health; 2017
- ✓ A Comparative Study for Modelling the Survival of Breast Cancer Patients in the West of Iran  
Global Journal of Health Science; 2016
- ✓ Investigation of the correlation between some immune system and biochemical indicators in patients with type 2 diabetes  
Human Antibodies; 2016

- ✓ Assessing the Effect of Sample Size on the Power of Multivariate Multiple Regression by Using Monte-Carlo Simulation  
World of Sciences Journal
  
- ✓ Factors Affecting Compliance to Insulin in Patients with Type 2 Diabetes in South Iran, 2017: We are faced with insulin phobia  
Iranian Journal of Medical Sciences; 2019
  
- ✓ Item and response-category functioning of the Persian version of the KIDSCREEN-27: Rasch partial credit model  
Health and Quality of Life Outcomes; 2012
  
- ✓ Protocol for the estimation of drinking water quality index (DWQI) in water resources: Artificial neural network (ANFIS) and Arc-Gis  
Methods X 6; 2019
  
- ✓ Comparison of artificial neural network and logistic regression models for prediction of outcomes in trauma patients: A systematic review and meta-analysis  
Injury; 2019
  
- ✓ Designing, constructing and analyzing Likert scale data  
J Educ Community Health; 2019
  
- ✓ Assessment of aloe vera for qualitative fit testing of particulate respirators: a logistic regression approach  
Industrial health; 2019
  
- ✓ Trends of incidence of colorectal cancer in Iran, 2003–2010  
Revista Latinoamericana de Hipertension; 2019
  
- ✓ Feasibility of replacing homemade solutions by commercial products for qualitative fit testing of particulate respirators: a mixed effect logistic regression study  
Methods X; 2019

- ✓ Outcome of Liver Transplant Patients With Intraoperative-Detected Portal Vein Thrombosis: A Retrospective Cohort Study in Shiraz, Iran  
Experimental and clinical transplantation: official journal of the Middle; 2019
  
- ✓ COMPARISON OF FLUORIDE CONTENT IN DRINKINGWATER AND PREVALENCE OF DENTAL FLUOROSIS IN 6-12-YEAR-OLD STUDENTS IN MARIWAN (A COLD REGION) AND BEHBAHAN (A WARM REGION) DURING THE...  
AVICENNA JOURNAL OF DENTAL RESEARCH
  
- ✓ Fit of cobalt chromium copings fabricated by the selective laser melting technology and casting method: A comparative evaluation using a profilometer  
Dental Research Journal
  
- ✓ Forecasting blood demand for different blood groups in Shiraz using auto regressive integrated moving average (ARIMA) and artificial neural network (ANN) and a hybrid approaches  
Scientific Reports
  
- ✓ Employing a three-stage procedure to develop a sizing system for medical gloves  
Ergonomics
  
- ✓ Development of an ergonomic, portable, climber-propelled date tree climbing device  
Journal of Agromedicine
  
- ✓ The time trend of suspected stroke call in emergency medical services: a time series study  
Journal of Health Science and Surveillance System
  
- ✓ Developing a Decision Aid Tool for selecting pen-paper observational ergonomics techniques: a quasi-experimental study  
Medicina del lavoro

- ✓ A Mixed-Methods Investigation of Occupational Health Specialists' Knowledge and Application of Pen-and-Paper Observational Methods for Ergonomics Assessment  
IISE Transactions on Occupational Ergonomics and Human Factors
- ✓ Prevalence of Late Presenters and Advanced HIV disease in HIV patients and their related factors in Iran: Results from 19 years of national surveillance HIV data  
AIDS Research and Human Retroviruses
- ✓ Effect of Covid-19 Vaccination on Survival of Iranian Patients: comparison of Cox regression, survival Tree & Forests  
Journal of Health Sciences & Surveillance System
- ✓ Incidence of and Maternal-fetal Risk Factors Associated with Therapeutic Abortion: A Nested Case-control Design Based on a Population-based Historical Cohort  
Journal of Health Sciences & Surveillance System
- ✓ Estimation of 10-Year Risk of Cardiovascular Diseases Using WHO Risk Prediction Charts: A Population-Based Study in Southern Iran  
Iranian Journal of Public Health
- ✓ The prevalence and predictors of pre-diabetes and diabetes among adults 40–70 years in Kharameh cohort study: A population-based study in Fars province, south of Iran  
Journal of Diabetes & Metabolic Disorders
- ✓ Recommended maximum holding time of common static sitting postures of office workers: Recommended maximum holding time of common sitting postures  
International Journal of Occupational Safety and Ergonomics
- ✓ Effectiveness of Supportive Educative Programs on the Care Burden of Informal Caregivers and Perceived Social Support of the Older Adults: a Quasi-experimental Study  
Ageing International

- ✓ A Medical Nebulizer as a Substitute for the OSHA-Approved Nebulizer for Qualitative Fit testing of Respirators During the Respiratory Infectious Pandemics: An Experimental Feasibility Study

Disaster Medicine and Public Health Preparedness

- ✓ Factors related to psychological well-being amongst patients with type 2 diabetes

Diabetes Research and Clinical Practice

- ✓ Factor Analysis of Metabolic Syndrome Components in a Population-Based Study in the South of Iran (PERSIAN Kharameh Cohort Study)

Iranian Journal of Public Health

- ✓ Which criteria is a better predictor of ICU admission in trauma patients? An artificial neural network approach

The Surgeon

- ✓ Predicting the natural history of metabolic syndrome with a Markov-system dynamic model: a novel approach

BMC medical research methodology

- ✓ Comparison of the effect of mothers and students' education on the promotion of oral health behaviours in female students, using the health belief model

International Journal of Dental Hygiene

- ✓ Impact of social and clinical factors on the diagnostic delay of chronic kidney disease: an evaluation study

International Urology and Nephrology

- ✓ Chronic kidney disease and its health-related factors: a case-control study

BMC nephrology

- ✓ Comparison of laboratory-based and non-laboratory-based WHO cardiovascular disease risk charts: a population-based study

Journal of Translational Medicine

- ✓ Factors associated with survival of Iranian patients with COVID-19: comparison of Cox regression and mixture cure model

Tropical Diseases, Travel Medicine and Vaccines



- ✓ Investigation of office workers' sitting behaviors in an ergonomically adjusted workstation  
International Journal of Occupational Safety and Ergonomics
- ✓ Agreement between laboratory-based and non-laboratory-based Framingham risk score in Southern Iran  
Scientific Reports
- ✓ Assessment of aloe vera for qualitative fit testing of particulate respirators: a logistic regression approach  
Industrial Health
- ✓ The dynamics of metabolic syndrome development from its isolated components among Iranian children and adolescents: Findings from 17 Years of the Tehran Lipid and Glucose Study (TLGS)  
Diabetes & Metabolic Syndrome: Clinical Research & Reviews
- ✓ Developing a Model for Prediction of Serum 25-Hydroxyvitamin D Level: The Use of Linear Regression and Machine Learning Methods  
Journal of the American College of Nutrition
- ✓ Investigating the short-term effects of using full-body hospital personal protective equipment and changes in physical workload intensity on human physiological and cognitive performance  
Ergonomics
- ✓ Does Size Affect the Rate of Perforation? A Cross-sectional Study of Medical Gloves  
Annals of Work Exposures and Health
- ✓ Quantitative fit testing of filtering face-piece respirators during the COVID-19 pandemic reveals anthropometric deficits in most respirators available in Iran  
Journal of Environmental Health Science and Engineering
- ✓ Prevalence and Incidence of Insulin Dependent Diabetes Mellitus (IDDM) in Fars province in the South of Iran, 2016-17: An Insurance Archived-Prescription-based Study  
Journal of Health Sciences & Surveillance System
- ✓ Association of Routine Hepatitis B Vaccination and Other Effective Factors with Hepatitis B Virus Infection: 25 Years Since the Introduction of National Hepatitis B Vaccination in Iran  
Iranian Journal of Medical Sciences

- ✓ Common errors in selecting and implementing pen–paper observational methods by Iranian practitioners for assessing work-related musculoskeletal disorders risk: a systematic review  
International journal of occupational safety and ergonomics
- ✓ Dynamic behavior of metabolic syndrome progression: a comprehensive systematic review on recent discoveries  
BMC endocrine disorders
- ✓ Adherence to Insulin Treatment in Patients with Type 2 Diabetes: Comparison of Logistic Regression and Conditional Tree and Forests to Determine the Effective Factors  
Journal of Health Sciences & Surveillance System
- ✓ Fit of cobalt-chromium copings fabricated by the selective laser melting technology and casting method: A comparative evaluation using a profilometer  
Dental Research Journal
- ✓ Item response analysis to explore psychometric properties of the Persian version of Troutman successful aging inventory: Rasch partial credit model  
Journal of Health Psychology
- ✓ Immunity to Hepatitis-A virus: A nationwide population-based seroprevalence study from Iran  
Vaccine
- ✓ Qualitative fitting characteristics of filtering face-piece respirators on Iranian people  
Journal of Environmental Health Science and Engineering
- ✓ Using health belief model to predict oral health behaviors in girl students: A structural equation modeling  
Pediatric Dental Journal
- ✓ Prevalence of metabolic syndrome and its components among a population-based study in south of Iran, PERSIAN Kharameh cohort study  
Clinical Epidemiology and Global Health
- ✓ Adherence to medication, diet and physical activity and the associated factors amongst patients with type 2 diabetes  
Diabetes Therapy
- ✓ The exponentially increasing rate of patients infected with COVID-19 in Iran  
Archives of Iranian medicine

- ✓ Exponentially Increasing Trend of Infected Patients with COVID-19 in Iran: A Comparison of Neural Network and ARIMA Forecasting Models  
Iranian Journal of Public Health
- ✓ Factors affecting the economic burden of breast cancer in southern Iran  
BMC Health Services Research
- ✓ Investigating the relationship between liver enzymes and incidence of hypertension: A population-based cohort study in Kharameh, a city in the South of Iran  
Health Science Reports
- ✓ Effect of COVID-19 Vaccination on Survival of Iranian Patients: comparison of Cox Regression, Survival Tree and Forests  
Journal of Health Sciences and Surveillance System

#### **ADVISORY COMMITTEE MEMBER OF:**

- ✓ evaluation of Marginal fit and internal fit of Cobalt-Chromium copings fabricated by selective laser melting technology and casting  
As dental attending thesis; UMSHA; 2015
- ✓ Evaluating the effect of attached gingiva on pre-implant tissue  
As dental MD thesis; UMSHA; 2015
- ✓ measurement of dental anxiety in 7-14 year's old children referral to Hamadan dental school in 2014-2015 and the role of environmental factors in proportion their anxiety  
As dental MD thesis; UMSHA; 2015
- ✓ A comparative evaluation of fluoride content in drinking water and prevalence of dental fluorosis in children between 6 - 12 years old in Mariwan (cold region) and Behbahan (tropical area) in 2013  
As dental MD thesis; UMSHA; 2014
- ✓ Evaluating the efficacy of Brome lain on donor wound healing after free gingival graft procedure  
As dental MD thesis; UMSHA; 2015

- ✓ A Comparison Between a type of Disclosing Tablets and Disclosing Tablets Made by Beet root  
As dental MD thesis; UMSHA; 2015
- ✓ Investigation the correlation between lipid profile and fasting blood sugar in patients with type II diabetes mellitus with neutrophil to lymphocyte ratio in compared with control group  
As Research Project; UMSHA; 2014
- ✓ Design, fabrication and evaluation of appropriate lift aid for climbing palm tree to enhance efficiency and users' safety and comfort  
As Professional Health MSc thesis; SUMS; 2015
- ✓ Evaluating the effectiveness of hepatitis B national immunization program in individuals 22 years and lower in the city of Shiraz: 1994-2016  
As Epidemiology Ph.D. thesis; SUMS
- ✓ Application of artificial neural network in predicting criteria for ICU admission in trauma patients in Shahid Rajaei Hospital in Shiraz during 2015 to 2017  
As Epidemiology Ph.D. thesis; SUMS
- ✓ prevalence of insulin refusal among eligible patient type 2 DM, Shiraz, 2016  
As Epidemiology MSc thesis; SUMS
- ✓ Effectiveness of Elderly Care Program on Reducing Burden of Care and Fatigue of Unofficial Caregivers in Comprehensive Health Centers of Jahrom City, Iran  
As Aging Health MSc thesis; SUMS
- ✓ Effectiveness of Couple's Menopausal Health Education on Men's Marital Satisfaction, Quality of Life (QoL) and Dyadic Coping in Their Wives  
As Aging Health MSc thesis; SUMS

- ✓ The effect of stress management and self-management interventions in sport and nutrition on coping self-efficacy, social support and general health of divorced women in Shiraz

As Health Promotion MSc thesis; SUMS

- ✓ Efficacy assessment of commercial and synthetic solutions in qualitative fit testing of particulate respirators in Iranian marketplace in 1396

As Professional Health MSc thesis; SUMS