




## KIRORI MAL COLLEGE, UNIVERSITY OF DELHI



Titl e	Prof.	First Nam e	Alka	Middl e Name	Last Name	Sabharwal	Photograph
Designation	<b>Professor</b>						
Address	<b>Department of Statistics, Kirorimal College, University of Delhi  Delhi -110007</b>						
Phone No Office	<b>01127667861</b>						
Residence	<b>D-11, II nd floor, Mansarover Garden, New Delhi-110015</b>						
Mobile	<b>+919311589805</b>						
Email Web-Page	<b><u><a href="mailto:alkasabh@gmail.com">alkasabh@gmail.com</a></u></b>						
<b>Educational Qualifications</b>							
Degree	Institution					Year	
<b>Ph.D.</b>	<b>Department of Statistics ,Delhi University, Delhi</b>					<b>2006-2012</b>	
<b>M.Phil.</b>	<b>Department of Statistics ,Delhi University, Delhi</b>					<b>1987-1991</b>	
<b>M.A</b>	<b>Hindu College, Delhi University, Delhi</b>					<b>1985-1987</b>	
<b>B.A(Hons)</b>	<b>Hindu College, Delhi University, Delhi</b>					<b>1982-1985</b>	
<b>Career Profile</b>							
<ul style="list-style-type: none"> <li>• <b>Joined Kirorimal College on 8th August 1991 in the department of statistics as lecturer.</b></li> <li>• <b>Promoted to senior scale w.e.f. 8 August 1998</b></li> <li>• <b>Designated as Reader w.e.f. . 8 August 2001 Associate Professor till 30th September 2018</b></li> <li>• <b>Professor w.e.f 30 th September 2018 till date Thirty years of teaching experience.</b></li> </ul>							
<b>Administrative Assignments</b>							
<ul style="list-style-type: none"> <li>• <b>Appointed member of the committee of courses for undergraduate studies (excluding hons) in Statistics for two years with effect from 1.10.2001.</b></li> <li>• <b>Staff Advisor 2001 -2003</b></li> <li>• <b>Teacher In-charge from 2003-2005</b></li> </ul>							

<ul style="list-style-type: none"> <li>• <b>Staff Advisor 2015 till 2017</b></li> <li>• <b>Admission In-charge- 2017,2018,2019</b></li> <li>• <b>Teacher In-charge 2019-2020</b></li> <li>• <b>Member of Screening Committee ( July 2019 to 2020)</b></li> <li>• <b>PF committee convenor (07-08-2021- till date)</b></li> </ul>
Areas of Interest / Specialization
<b>Biostatistics and survival Analysis, Data Analysis using robust statistical modelling</b>
Subjects/papers Taught
<ul style="list-style-type: none"> <li>• <b>Calculus</b></li> <li>• <b>Fundamental of Statistics</b></li> <li>• <b>Biostatistics</b></li> <li>• <b>Survey Sampling</b></li> <li>• <b>Stochastic Processes</b></li> <li>• <b>Statistical computing and analysis using Excel, SPSS and R.</b></li> </ul>
Research Guidance
<p><b>Joint Supervisor along with</b> Prof. Gurprit Grover, Department of Statistics, University of Delhi, Delhi for PhD of following scholars</p> <ol style="list-style-type: none"> <li>1. Mr. Sharwan Kumar, Associate Professor, Kirorimal College, University Of Delhi. Current Status: Awarded</li> <li>2. Ms. Sakshi Kaushik, Research Scholar, Department of Statistics, University of Delhi. Current Status: Awarded</li> <li>3. Dr. K.E.S.Unni, Batch-2013, Santosh Medical College, Ghaziabad, U.P Current Status: Awarded</li> </ol> <p><b>Supervisor</b></p> <ol style="list-style-type: none"> <li>4. Mr. Lalit Kumar Joshi, Research Scholar, Department of Statistics, University of Delhi. Current Status: Enrolled</li> </ol>
Publications Profile
<p><i>Publication Details: (attach copy of each separately)—Enclosed----</i></p> <p><i>a. Books (sole author/co-author/edited):</i></p> <p><i>b. Chapters in book</i></p> <p><i>Sabharwal, A., &amp; Kaushik, S. (2021). Determining the Length of Stay and Duration of Illness for Psychiatric Inpatients Using Multivariate Modelling. Current Topics on Mathematics and Computer Science , ISBN -978-93-91473-38-9, Vol. 5, 1-22.</i></p> <p><i>Sabharwal, A., &amp; Goyal, B. (2021). Estimating the Effect of Interactive Workshop on Cognitive</i></p>

*Abilities of Elderly People Staying in Old Age Homes through Truncated Binomial Model. Current Topics on Mathematics and Computer Science, ISBN -978-93-91473-38-9, Vol. 5, 34-45.*

*Sabharwal, A., Goyal, B., & Dhingra, N. A. (2021). Effect of Parental Mental Health in Estimation of One Personality Trait from Others with Structural Equation Models. Current Topics on Mathematics and Computer Science, ISBN -978-93-91473-38-9, Vol. 5, 97-111.*

*c. Articles/Research papers (mention impact factor, SJR, H- index wherever applicable)*

- Identifying Patients With Diabetic Nephropathy Based On Serum Creatinine Under Zero Truncated Model (2010), ISSN 2070-5948, **SJR** 0,187, **H- index** 3.
- A Parametric Approach to Estimate Survival Time of Diabetic Nephropathy with Left Truncated and Right Censored Data (2012), ISSN 1927-7032, **SJR**: 0.158, **h-index**: 3.
- Identifying patients with diabetic nephropathy based on serum creatinine in the presence of covariates in type-2 diabetes: A retrospective study (2012), ISSN0 970-938X.
- A Bayesian Approach for Estimating Onset Time of Nephropathy for Type 2 Diabetic Patients under Various Health Conditions (2013), ISSN 1927-7032 E-ISSN 1927-7040, **SJR**: 0.158, **h-index**: 3.
- An Application of Gamma Generalized Linear Model for Estimation of Survival Function of Diabetic Nephropathy Patients (2013), **ISSN: 1929-6029, SJR: 0.133, h-index: 3.**
- Application of Multivariate and Bivariate Normal Distributions to Estimate Duration of Diabetes (2014),**ISSN: 2168-5215, SJR: 0.269, h-index: 31.**
- Estimation of Survival Function and Probability of Onset of Diabetic Nephropathy using Path Analysis and Analysis of Covariance (2014), ISSN (Online) 2319-183X, (Print), 2319-1821.
- Alternate Psychological Therapies to Treat Children with Disturbing Behavior and Mental Illness -A Case Study (2015), ISSN (Online) 2319-183X, (Print) 2319-1821.
- Estimating Length of Stay and Duration of Illness for Psychiatric Inpatients using Multivariate Modelling (2015) **ISSN (Print): 2328-7306. ISSN (Online): 2328-7292, SJR: 0.344, h-index: 11.**
- Sabharwal, A., & Grover, G. (2018). Comparison Of Diabetic Nephropathy Onset Time Of Two Groups With Left Truncated And Right Censored Data. *STATISTICS IN TRANSITION new series,19(3), 527–549.*
- Sabharwal A. , Grover G., Kumar S. ( 2018) A Predictive Model for Progression of Chronic Kidney Disease: A Systematic Review. *STATISTICS AND APPLICATIONS.*
- Sabharwal, A., Grover, G., Kaushik, S., & Unni, K. S. (2019). Modelling and forecasting P ositive and N egative S yndrome S cale scores to achieve remission using time series analysis. *International journal of methods in psychiatric research, 28(1), e1763.*
- Sabharwal, A., Grover, G., & Kaushik, S. (2019). Testing the difference between bipolar disorder and schizophrenia on the basis of the severity of symptoms with C ( $\alpha$ )

test. *Journal of Applied Statistics*, 46(11), 2101-2110.

- Grover, G., Sabharwal, A., Kumar, S., & Thakur, A. K. (2019). A Multi-State Markov Model for the Progression of Chronic Kidney Disease. *Türkiye Klinikleri Biyoistatistik*, 11(1), 1-14.
- Sabharwal, A., Grover, G., & Kumar, S. (2019). Statistical significance of prognostic factors on the progression of chronic kidney disease through simulation study. *Journal of Nephro pharmacology*, 8(2), 20-20.
- Grover, G., Sabharwal, A., Kumar, S., & Thakur, A. K. (2019). On the estimation of misclassification probabilities of chronic kidney disease using continuous time hidden Markov models, NPJ. *Journal of Nephro pharmacology*, 8(1),1-6.
- Unni, K. S., Srivastava, R. , Sabharwal,A., Goyal, B. (2019). Assessing the effect of parent's psychiatric health and environment on adolescent students using GHQ-12. *International Journal of Scientific Research*,8(7),41-43.
- Unni, K. S., Srivastava, R., Sabharwal, A., Goyal, B. (2019). Assessing the effect of Parental Psychiatric disorder on Adolescents using Brief Psychiatric Rating Scale – A Case Study. *International Journal of Research in Social Sciences* ,9(7), 401-16.
- Alka Sabharwal, Babita Goyal. Rita Jain (2020). Truncated Binomial Model to Estimate the Effect of Interactive Workshop on Cognitive Abilities of Elderly People Staying in Old Age Homes in Old Age Homes in Delhi, India. *International Journal of Statistics and Applications*,10(4), 103-112.
- Alka Sabharwal, Babita Goyal. KE Sadanandan Unni(2020). Effect of Lockdown due to COVID-19 on Psychological Health of Young Adults- A Survey Report . *The Journal of Medical Research*,6(5),203-211.

d. Articles published in Conference proceedings: None

e. Patents: None

#### Conferences/Workshops/ Trainings organized

“Role of Statistics in Medicine” by Dr. Arvind Pandey, Proforror, National Institute of Medical Statistics, ICMR ,Ansari Nagar.

#### Conferences/Workshops/ Trainings attended as faculty member

- *CPDHE Refresher Course 1997*
- *CPDHE Refresher Course 1999*
- *CPDHE Refresher Course 2001*
- Workshop on Statistical Computing Using R, organised by Department of Statistics, Delhi University, 14-15, September 2013.
- Workshop on Machine Learning with R, organised by Department of Statistics, Kirorimal College, Delhi University, 21-22, March 2019.
- Workshop on Service related training programme, organized by IQAC Kirorimal College, University of Delhi, 14 th September, 2019.
- *Workshop on Multivariate data Analysis and its interpretation using SPSS organized by Institute for Statistics and Analytical Research for three days, 23-04-21 to 25-04-21*
- *Workshop on Data Analysis using Business Excel organized by Global Institute of Statistical Solutions for three days, 26-04-21 to 28-04-21*
- *Workshop on SEM and CFA using AMOS software organized by Global Institute of Statistical Solutions for three days, 09-06-21 to 11-06-21*

#### **PAPER PRESENTATION AT NATIONAL / INTERNATIONAL CONFERENCES**

- VI International Symposium on Operational Research and Statistics; *Dec 29-31, 2008, Aligarh Muslim University, Aligarh. Title: Application of Models for Estimating renal disease in the presence of three known covariates in type 2 diabetes*
- *National Conference on Medical Statistics, Oct 6 – 8; 2012, Dayanand Medical College, Ludhiana. Title: Identifying Patients With Diabetic Nephropathy Based On Serum Creatinine Under Zero Truncated Model.*
- *XXXI Annual Conference of Indian Society for Medical Statistics; Oct 24-26; 2013; Christian Medical College, Vellore. Title: Identifying patients with diabetic nephropathy based on serum creatinine in the presence of covariates in type-2 diabetes: A retrospective study.*
- International Conference on Role of Statistics in the Advancement of Science and Technology, *Dec 16-18; 2013, University of Pune, Pune. Title: A Parametric Approach to Estimate Survival Time of Diabetic Nephropathy with Left Truncated and Right Censored Data.*
- International Conference on Quality, Reliability, Infocom Technology and Business Operations, *Dec 27-29; 2018, Department of Operational Research, University of Delhi, Delhi Title: A Parametric Approach to Estimate Survival Time of Diabetic Nephropathy with Left Truncated and Right Censored Data.*

#### **Invited lectures/resource persons**

- The technical Session under the general theme "Bio statistics" of the training program on 27th Nov. 2014, *CPDHE*

#### **Invited Speaker**

- International conference on Emerging Innovations in Statistics and Operational research, 27-30 Dec, 2018. Handling Retrospective and cross-sectional Data in Biomedical Studies with Statistical Modelling.

**Session Chaired**

- International Conference on Quality, Reliability, Infocom Technology and Business Operations ,Dec 27-29; 2018, Department of Operational Research, University of Delhi, Delhi

**Resource Person**

Guru Angad Dev-Teaching Learning Centre of Ministry of Education (PMMMNMST scheme) in collaboration with Department of Botany & Department of Mathematics is organizing a Two-week Online National Faculty Development Program (FDP) on Biostatistical & Mathematical Skills with Excel and R” for Teachers, students (UG/PG) and Research Scholars from 16th August 2021 to 31st August 2021.

- **Lect.1- Quantitative and Qualitative Data Research with illustrations**
- **Lect. 2- Correlation and Linear Regression with its Applications in Biosciences-I**
- **Lect. 3-Multiple and Logistic Regression with its Applications in Biosciences-II**

Research Projects (Title ,funding agency and funds received)

Awards and distinctions

**Senior Fellowship, CSIR 1990**

**Qualified CSIR-UGC National Eligibility Test (NET)for lectureship, December,1989**

**M.Phil. degree ----1<sup>st</sup> division with Distinction.**

Association With Professional/learned Bodies

**Life member of Indian Society for Probability and Statistics (ISPS)**

**Life member of Indian society for medical statistics (isms)**

Membership of College societies and initiatives undertaken

Other activities

- Guest faculty in **Department of Environmental Studies**, University of Delhi for Ph.D. Course work , 2013 – 14.
- Appointed as Judge for selecting the Microsoft Innovative Educator Expert.
- Collaboration with staff and M.D students of Department of **Child and Adolescent Psychiatry of psychiatry and De addition services of Lady Hardinge Medical College and Smt. Sucheta Kripalani Hospital**, 2006 – 2010
- **Member, Syllabus formation committee for Semester system, FYUP and LOCF.**
- **Member of Advisory committee of research scholars pursuing Ph.D. program from Department of Statistics, University of Delhi, Delhi.**



Signature of Faculty Member

