




Faculty Details proforma for DU Web-site

Title	Prof.	First Name	GURPRIT	Last Name	GROVER	Photograph
Designation		Professor				
Address	Campus	Department of Statistics, Faculty of Mathematical Sciences, University of Delhi, Delhi -110007, India				
	Residence	63, Sweet Homes Apartment, Sector 14, Rohini, Delhi-110085.				
Phone No	Office	27666671/306				
ORCID		https://orcid.org/0000-0003-2051-4810				
Email		gurpritgrover@yahoo.com				
Educational Qualifications						
Degree		Institution				Year
Ph.D.		University of Delhi				1985
M.Phil.		University of Delhi				1982
PG		University of Delhi (Hindu College)				1980
UG		University of Delhi (Hindu College)				1978
Career Profile						
Organisation / Institution	Designation	Duration	Role			
University of Delhi	Assistant Professor	1983 - 1986	Teaching			
University of Delhi	Assistant Professor	1986 -1997	Teaching			
University of Delhi	Associate Professor	1997 – 2008	Teaching and Research			
University of Delhi	Professor	2008 to date	Teaching and Research			
Administrative Assignments						
As assigned by the Department.						
Areas of Interest / Specialization						
Biostatistics, Demography.						
Subjects Taught						
Biostatistics, Demography, Statistical Quality Control, Reliability.						
Research Guidance						
<ol style="list-style-type: none"> 1. Supervision of Awarded Doctoral Thesis: Fourteen (one submitted) 2. Supervision of Doctoral Thesis, under progress: Seven (under progress). 3. Supervision of Awarded M.Phil. Dissertation: Twenty Four 						

Publications Profile

Books:

1. Gurprit Grover and Nezhat Shakeri. 2009 (1st ed.). Estimation of Incidence and Survival Function of Doubly Censored Data: with application to HIV/AIDS. VDM Verlage, Germany, ISBN: 978-3-639-16724-5.
2. Neeta Makhija and Gurprit Grover. 2011 (1st ed). Statistical Estimation of Survival Time of Cardiac Patients: A Study under Various Conditions. LAP Lambert Academic Publishing, Germany, ISBN: 978-3-8465-5588-0.
3. Dulumoni Das and Gurprit Grover. 2014 (1st ed) Statistical Methods on HIV/AIDS LAP Lambert Academic Publishing, Germany, ISBN: 978-3-659-21418-9.

Research Paper published in Refereed/Peer Reviewed Journals :

- Goel K, **Grover G**, Sharma A, Bae S. Multistate Markov model for predicting the natural disease progression of type 2 diabetes based on hemoglobin A1c. *J Nephropharmacol.* 2019;8(1):e04.
- **Grover G**, Sabharwal A, Kumar S, Thakur AK. On the estimation of misclassification probabilities of chronic kidney disease using continuous time hidden Markov models. *J Nephropharmacol.* 2019;8(1):e073
- 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 (α) test. *Journal of Applied Statistics*, 1-10.
- Sabharwal A, **Grover G**, Kumar S. Statistical Significance of Prognostic Factors on The Progression Of Chronic Kidney Disease Through Simulation Study. *J Nephropharmacol.* 2019;8(2):e20.
- **Grover G**, Thakur AK, Garg B. Cure Fraction Estimation for Traumatic Lumbar Puncture in Patients with Acute Lymphoblastic Leukemia. *Research & Reviews:Journal of Oncology & Hematology.* 2018; 7(3): 1221p.
- **Grover G**, Vinit PK, Thakur AK. Actuarial Modeling of Insurance Premium for Patients with Acute Lymphoblastic Leukemia (ALL). *Journal of Applied Quantitative Methods*, 13(4).
- Sabharwal A, **Grover G**, Kumar S. A Predictive Model For Progression Of Chronic Kidney Disease : A Systematic Review. *Int. J. Agricult. Stat. Sci.* Vol. 14, No. 2, pp. 637-646, 2018.
- **Grover G**, Sharma A. Examining the Effect of Reduction of Predictors Affecting the Survival Time of HIV/ AIDS Patients using a Multiple Correlation/ Association Technique. *J Commun Dis* 2018;50(3):15-21.
- Varshney MK, **Grover G**, Ravi V, Thakur AK. Cure Fraction Model for the Estimation of Long-term Survivors of HIV/ AIDS Patients under Antiretroviral Therapy. *J Commun Dis* 2018; 50(3): 1-10.

- Gupta, V. K., & Grover, G. (2017). Multiple imputation for gamma outcome variable using generalized linear model. *Journal of Statistical Computation and Simulation*, 87(10), 1980-1988.
- Swain, P. K., Grover, G., Chakravorty, S., Goel, K., & Singh, V(2017). Estimation of Number of Involved Lymph Nodes in Breast Cancer Patients using Bayesian Regression Approach. *J. Stat. Appl. Pro. Lett. USA*; 4, No. 1, 17-25.
- Grover, G., Goel, K., & Seth, D.(2017). Application of Univariate Frailty Models in Modeling Survival Data with a Cured Fraction. *Journal of Applied Quantitative Methods*, Italy; Vol.11, Issue-4.
- Grover, G. & Goel, K.(2017). Estimating the Cure Fraction among Cancer Patients by using Promotion Time Cure Rate Model with Negative Binomial Distribution. *Journal of Applied Quantitative Methods*, Italy; Vol.11, Issue-4.
- Swain, P. K., Grover, G., & Goel, K. (2016). Mixture and Non-Mixture Cure fraction Models based on Generalized Gompertz Distribution under Bayesian approach. *Tatra Mountains Mathematical Publications, Slovakia*; Vol.66 , 121–135.
- Manoj Kumar Varshney, Vajala Ravi, Gurprit Grover, A.K. Godpayle & Chander Shekhar (2016). Survival Pattern of AIDS Patients by Different Types of TB and Associated Prognostic Factors. *Demography India*, Vol.45, Issue:1&2,pp:131-142, ISSN:0970-454X.
- Grover, G., Gupta, V. K., & Arora, M. (2016). Trend in BMI z-score among Private Schools' Students in Delhi using Multiple Imputation for Growth Curve Model. *Epidemiology, Biostatistics and Public Health*, 13(2).
- Grover, G., Gupta, V. K., & Swain, P.K. (2016). Estimation of Sub-distribution Hazard ratio of HIV/AIDS Patients for Interval Censored Data with Loss to Follow up as a Competing Risk. *J. Commun. Dis*, 48(3), 22-28.
- Swain, P., & Grover, G. (2016). Accelerated Failure Time Shared Frailty Models: Application to HIV/AIDS Patients on Anti-Retroviral Therapy in Delhi, India. *Turkiye Klinikleri Journal of Biostatistics*, 8(1), 13-20.
- Swain, P., & Grover, G. (2016). Determination of Predictors Associated With HIV/AIDS Patients on ART Using Accelerated Failure Time Model for Interval Censored Survival Data. *American Journal of Biostatistics (USA)*. 6.1; ISSN: 1948-9897.
- Grover, G., Sabharwal, A. and Kaushik, S., (2015). Estimating Length of Stay and Duration of Illness for Psychiatric in patients using Multivariate Modelling. *American Journal of Mathematics and Statistics*, 5(6), pp.329-353.
- Sunil Kanti Mondal, Rabindra Nath Das, Sudip Kundu, Jinseog Kim , Gurprit Grover and Shamim Akhtar Ansari (2015), Mean Variance Relationships of Genome Size and GC Content, *Annual Research & Review in Biology(USA)*, 7(4): 206-221. ISSN: 2347-565X.

- Gurprit Grover, Prafulla Kumar Swain, Vishal Deo and Manoj Kumar Varshney (2015), A joint modeling approach to assess the impact of CD4 cell count on the risk of loss to follow up in HIV/AIDS Patients on Antiretroviral Therapy, *International Journal of Statistics and Applications (USA)*, Vol- 5(3); 99-108, ISSN: 2168-5215.
- Gurprit Grover, Vajala Ravi and Prafulla Kumar Swain (2015) On the assessment of various factors effecting the improvement in CD4 count of aids patients undergoing antiretroviral therapy using generalized Poisson regression, *Journal of Applied Statistics (USA)*, 42(6), pp: 1291-1305, ISSN: 1360-0532.
- Gurprit Grover and Vinay Kumar Gupta (2014), Multiple imputation of censored survival data in the presence of missing covariates using restricted mean survival time, *Journal of Applied Statistics (USA)*, 42(4),pp: 817-827, ISSN: 1360-0532.
- Gurprit Grover, Alka Sabharwal, and Juhi Mittal (2014), Estimation of Survival Function and Probability of Onset of Diabetic Nephropathy using Path Analysis and Analysis of Covariance, *International Refereed Journal of Engineering and Science (IRJES) (India)*, 3(4), pp: 50-58. ISSN:2319- 183X
- Gurprit Grover, A.K. Gadpayle, M.K. Varshney and Vajala Ravi (2014) A Follow-Up Study on Survival Trend of AIDS Patients Reported at ART Center in Delhi & Variation According to Age, Sex, Stages & Mode of Transmissions, *Journal of Medical Education and Research (India)*, 16(2), pp: 76-88.
- Gurprit Grover, Divya Seth, Vajala Ravi and Prafulla Kumar Swain (2014) A Multistate Markov Model for the Progression of Liver Cirrhosis in the Presence of Various Prognostic Factors, *Chilean Journal of Statistics(Chile)*, 5(2),pp: 15-27. ISSN:0718-7920
- Gurprit Grover and Divya Seth (2014) Application of Frailty Models on Advance Liver Disease Using Gamma as Frailty Distribution, *Journal of Statistics Research Letters (USA)*, 3(1), pp: 42-50. ISSN: 2325-7059
- Gurprit Grover, Prafulla Kumar Swain and Vajala Ravi (2014). A Competing Risk Approach With Censoring to Estimate the Probability of Death of HIV/AIDS Patients on Antiretroviral Therapy in the Presence of Covariates, *Journal of Statistics Research Letters (USA)*, 3(1), pp: 7-16. ISSN: 2325-7059.
- Grover, G., Sabharwal, A., & Mittal, J. (2014). Application of Multivariate and Bivariate Normal Distributions to Estimate Duration of Diabetes. *International Journal of Statistics and Applications*, 4(1), 46-57.
- Gurprit Grover and Vajala Ravi (2014). On the estimation of expected survival time of AIDS patients undergoing Antiretroviral therapy using censored generalized Poisson regression model, *Turkiye Klinikleri J Biostat (Turkey)*, 6(1): pp: 24-32. ISSN: 1308-7894
- Gurprit Grover and Barnali Deka (2013). Modeling the Risk of Renal Impairment using Current Status Chronic Kidney Disease Data: A Simulation based Analysis, *Indian journal of Applied Research (India)*, 3(12), 12, pp 538-541 . ISSN: 2249-555X
- Gurprit Grover and Barnali Deka (2013). Spline-based Hazards Regression Model for Current Status Data: An Application to Simulated Data on Renal Impairment, *Indian journal of Applied Research(India)*, 3(12), pp 534-537. ISSN: 2249-555X

- Gurprit Grover, V Sreenivas, Sudeep Khanna, Divya Seth (2013). Multi state markov model: an application to liver cirrhosis. *Statistics in Transition-new series,(Poland)*; 14(3), pp: 429-442. ISSN 1234-7655
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- Gurprit Grover, Alka Sabharwal, and Juhi Mittal (2013). An Application of Gamma Generalized Linear Model for Estimation of Survival Function of Diabetic Nephropathy Patients, *International Journal of Statistics in Medical Research (Canada)*, vol-2, pp: 209-219. ISSN: 1929-6029/13
- Gurprit Grover, V.Sreenivas, Sudeep Khanna and Divya Seth (2013). Estimation of Survival of Liver Cirrhosis Patients, in the Presence of Prognostic Factors Using Accelerated Failure Time Model as an Alternative to Proportional Hazard Model, *International Journal of Statistics and Applications (USA)*, 3(4), pp: 113-122. ISSN: 2168-5215
- Gurprit Grover, Ravi Vajala and Manoj Kumar Varshney (2013). On the estimation of Average HIV population using various Bayesian techniques, *Applied Mathematics (USA)*, 3(3), pp: 98-106. ISSN: 2163-1425
- Gurprit Grover, Rabindranath Das, Prafulla Kumar Swain and Barnali Deka, (2013). On the Estimation of Survival of HIV/AIDS Patients on Antiretroviral Therapy Using NPMLE Method: An Application to Interval Censored Data, *American Journal of Mathematics and Statistics (USA)*, 3(4); pp: 213-219. ISSN: 2162-8475
- Gurprit Grover, Adesh Kumar Gadpayle, Prafulla Kumar Swain, and Barnali Deka (2013). A Multistate Markov Model Based on CD4 Cell Count for HIV/AIDS Patients on Antiretroviral Therapy (ART). *International Journal of Statistics in Medical Research (Canada)*, Vol. 2, pp:144-151. ISSN: 1929-6029/13
- Gurprit Grover, Alka Sabharwal, and Juhi Mittal (2013). A Bayesian Approach for Estimating Onset Time of Nephropathy for Type 2 Diabetic Patients Under Various Health Conditions. *International Journal of Statistics and Probability(Canada)*, 2(2), pp: 89-101. ISSN: 1927-7040
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- Gurprit Grover, and Alka Sabharwal (2012). A parametric approach to estimate survival time of diabetic nephropathy with left truncated and right censored data. *International Journal of Probability and Statistics*, Vol 1(1), pp.128-137(ISSN 1927-7032). ISSN: 1927-7040
- Gurprit Grover, A.K.Gadpayle, Alka Sabharwal (2012). Identifying patients with diabetic nephropathy based on serum creatinine in the presence of covariates in type-2 diabetes: A retrospective study. *Biomed Res- India*, 23 (4), pp. 615-624(ISSN 0970-938X).
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- Gurprit Grover and Dulumoni Das (2011). On the estimation of the expected proportion of AIDS cases using Bayesian approach. *The IUP Journal of Computational Mathematics*, Vol. IV(2), pp 37-48.
- Gurprit Grover and Dulumoni Das (2011). Decrement table and the estimation of HIV mortality rate with an application to Hemophilia-associated AIDS. *Journal of AIDS and HIV Research*, Vol. 3(1), pp 11-19. **ISSN: 2141-2359**
- Suddhendu Biswas, Gurprit Grover, Manoj Kumar Varshney (2011). A method of construction: A multiple increment- decrement life table of HIV population. *International Journal of Medical and Biological Frontiers*, Vol. 17, Issue 3, pp 187-200 (ISSN 1081-3829).
- Suddhendu Biswas, Sejong Bae, Karan P. Singh, Gurprit Grover, Manoj Kumar Varshney (2011). On an empirical Bayes estimator for the BLUE of HIV population based on CD4 cell count. *Far East Journal of Theoretical Statistics*. Vol. 34, Number 2, pp 85–108 (ISSN 0972-0863).
- Gurprit Grover and Neeta Makhija (2010). On the estimation of survival and death probabilities under myocardial infarctions in the presence of competing risks based on an illness-death model. *Journal of Communicable Diseases*, Vol. 42, pp. 1-17, ISSN 0019-5138.
- Nezhat.Shakeri and Gurprit Grover (2010): Estimation of survivorship function based on doubly censored data with application to HIV/AIDS. *Communications in Statistics—Theory and Methods*, Vol. 39, pp. 777–790, ISSN: 0361-0926.
- Gurprit Grover, A.K.Gadpayle and Neeta Makhija (2010). On the estimation of survival time of cardio-vascular disease patients using parametric and semi-parametric methods. *Electronic Journal of Applied Statistical Analysis (EJASA)*, vol. 3 Issue 1, pp. 1-17, ISSN 2070-5948.
- Gurprit Grover, A.K.Gadpayle, Alka Sabharwal (2010). Identifying patients with diabetic nephropathy based on serum creatinine under zero truncated model, *Electronic Journal of Applied Statistical Analysis*, Vol. 3, Issue 1, pp. 28-43, ISSN 2070-5948.
- Gurprit Grover and Rumi Dutta (2009): Survival analysis of acute myocardial infarction patients using non- www.du.ac.in Page 5 parametric and parametric approaches. *Electronic Journal of Applied Statistical Analysis (EJASA)* 1, pp.22-36. ISSN 2070-5948.
- Gurprit Grover, A.K Gadpayle and Rumi Dutta (2009): A study of cardiovascular risk factors in Delhi, India. *Journal of Communicable Diseases (JCD)* 41(2), pp. 71-80 , ISSN 0019-5138.
- Gurprit Grover, Rumi Dutta, A.K. Gadpayle, Salil Saha (2009): Changing patterns of cardiovascular risk factors and heart related sickness in relation with acute myocardial infarction in Delhi, India. *Journal of Indian Medical Association*, Vol. 107, pp. 636-642.

- Gurprit Grover, A. K. Gadpayle, Vidya Kulkarni and Rumi Dutta (2008): Expected time between first two consecutive heart attacks based on counter theory. J., Indian Academy of Clinical Medicine, 9(4), pp. 277-281. ISSN 0972-3560.
- Gurprit Grover, Tripti Pensi, A.K. Gadpayle and Tanushree Banerjee (2008): Evaluation of the WHO Clinical Case Definition of AIDS among children in India. Journal of Communicable Diseases, 40(1), pp. 5-11. ISSN 0019-5138.
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- Swami Onkar Shivraj, Debashish Chattopadhyaya and Gurprit Grover - (2007): Non-parametric estimation of the incidence period of AIDS with left truncation and right censoring. Journal of Data Science.(JDS-312), vol.5, no.1, pp. 289-296. ISSN 1683-8602.
- Gurprit Grover and Nezhat Shakeri (2007): Nonparametric estimation of survival function of HIV+ patients with doubly censored data. Journal of Communicable Diseases, 39(1), pp. 7-12. ISSN 0019-5138.
- Suddhendu Biswas, Gurprit Grover and Amar Bahadur Grung (2006): On the estimation of mortality and distribution of incubation period of AIDS. Biostatistical Aspects of Health Population, Hindustan Publishing Corporation (India), pp. 133-141.
- Gurprit Grover and Dulumoni Das (2005): On the construction of clinical life table for studying the survivability of diagnosed AIDS cases. Journal of communicable Diseases, 37(3), pp. 165-172. ISSN 0019-5138.
- Gurprit Grover and Nezhat Shakeri (2005): Estimation of incidence of HIV using modified back-projection method. Proceedings of the 5th IASC Asian conference on statistical computing, pp.37-40.
- Swami Onkar Shivraj, Debashish Chattopadhyaya, Gurprit Grover, Ashok Kumar and Usha k. Baveja (2005): Role of HCV coinfection towards disease progression and survival in HIV-I infected children: A follow up study of 10 years. Journal of Tropical pediatrics, pp. 1-6. ISSN 1464-3664.
- Gurprit Grover and Dulumoni Das (2004): Estimation of survivability of clinically diagnosed AIDS cases under competing risks using Cox's regression model. International Journal of Statistical Sciences, vol.3, pp. 21-27. ISSN 1683-5603.
- Gurprit Grover and Dulumoni Das (2004): Empirical Bayes estimate of survival time for clinically diagnosed AIDS cases. Assam Statistical review, pp. 75-80.
- Gurprit Grover and Nezhat Shakeri (2004): Comparison of Survival time Distributions Based on Doubly Interval Censored Data. Proceeding of the 7th Iranian Statistics Conference, pp 69-86.
- Gurprit Grover and Swami Onkar Shivraj (2004): Survival pattern of reported HIV infected individuals in the city of Delhi. Journal of communicable Diseases, 36(2), pp. 83-92. ISSN 0019-5138.

- Suddhendu Biswas, Gurprit Grover and Amar Bahadur Grung (2003): On a method to estimate the probability of the period of abstinence exceeding the period of past partum amenorrhea. *Demography India*, vol. 32, no. 2, pp. 201-213. ISSN 0970-454X.
- Gurprit Grover and Neeta Makhija (2003): On the estimation of expected survival time of heart patients based on preventive maintenance policy. *Assam Statistical Review*, vol.21, No.1-2, pp. 115-124.
- Gurprit Grover and Neeta Makhija (2002): Cox's regression model for the growth of a tumor followed by death from that tumor. *The Nepali Mathematical Science Report*, vol 20, no. 1&2, pp. 33-41.
- Suddhendu Biswas, Gurprit Nair and Vijay Kumar Sehgal (1987): Successive damage shock models predicting system survival time. *International Journal of Systems sciences*, vol. 18, no. 5, pp. 831-836. ISSN 1464-5319.
- Suddhendu Biswas, Gurprit Nair (1986): A palm probabilistic technique on the estimation of expected time of failure at a specified shock based on the data of earlier shocks. *Journal of Indian Society of Agricultural Statistics*, vol. 38, no. 2, pp. 240-248. ISSN 0019-6363.
- Suddhendu Biswas, Gurprit Nair (1985): On the development of successive damage shock model based on Palm probabilities. *Micro Electronics and Reliability*, Great Britain, vol.25, no. 2, pp.271-274. ISSN 0026 2714.
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Conference Organization/ Presentations

- **Participated and Chaired a session in the International Conference on Recent Trends of Computing in Mathematics, Statistics and Information Technologies, March 09-11, 2018, at Department of Mathematical Science & Computer Applications, Bundelkhand University, Jhansi, India.**
- **Participated and Chaired a session in the International Conference on Changing Paradigms and Emerging Challenges in Statistical Sciences (IPECS-2018) at Department of Statistics, January 29-31, 2018 at Pondicherry University, Puducherry, India.**
- **Participated and Chaired a session in the 30th Annual Conference of the Indian Society for Medical Statistics, October 6-8, 2012 at DM College, Ludhiana.**
- **Participated and chaired a session in the 5th IASC (International Association for Statistical Computing) Asian Conference on Statistical Computing, December 15 – 17, 2005, Hong Kong.**

Awards and Distinctions

- **Awarded UGC fellowship during M.Phil. and Ph.D.**
- **Awarded National scholarship during M.Sc.**

Association With Professional Bodies

Memberships:

- **International Statistical Society.**
- **International Biometric Society.**
- **Indian Society for Medical Statistics.**

A handwritten signature in black ink, appearing to read "E. G. ...", written in a cursive style.

Signature of Faculty Member

