

PERSONAL

NAME: SUMERA AZIZ

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CITIZENSHIP: Pakistan

MARITAL STATUS: Married

PLACE OF BIRTH: Thatta, Pakistan

EDUCATION

PhD in Epidemiology, Columbia University, Mailman School of Public Health-NYC-USA, 2019-2024

MPhil in Epidemiology, Columbia University, Mailman School of Public Health-NYC-USA, 2019-2022

FCPS (Fellowship of College of Physicians and Surgeons) in Community Medicine, Aga Khan University Karachi Pakistan, 2013-2017

MSc in Epidemiology and Biostatistics, Aga Khan University Karachi Pakistan, 2010-2012

MBBS: Equivalent to MD, Dow University of Health Sciences, Karachi Pakistan, 2003-2009

EMPLOYMENT HISTORY

Present	Postdoctoral Fellow Employee, Department of Pediatrics, University of Alberta, Canada
2019-2024	Fulbright scholar (United States Education Foundation Pakistan and Institute of International Education) and Teaching Fellow (Columbia University-USA)
2018-2019	Assistant Professor, Community Health Sciences, Aga Khan University, Karachi Pakistan
2015-2017	Senior Instructor, Community Health Sciences, Aga Khan University, Karachi Pakistan
2013-2014	Instructor, Community Health Sciences, Aga Khan University, Karachi Pakistan
2012	Tutorial Facilitator and Research coordinator, Aga Khan University, Karachi Pakistan

AWARDS AND SCHOLARSHIPS

1. 2023-24 Alberta Innovates **Postdoctoral Recruitment Fellowship (AI RF)** valued at \$70,000 (Canadian) to support Post doctoral training at University of Alberta, Canada
2. **Fulbright Scholarship** by the United States Department of State to support PhD degree in Epidemiology from Columbia University Mailman School of Public Health; 2019-2024
3. **The Jeremiah Barondess Award in Epidemiology** for making a transformational change to people's health-May 14, 2024
4. **Allen Rosenfield Award** by Columbia University Mailman School of Public Health; 2019-2021
5. Annual **Outstanding Teacher Award**-2018- Aga Khan University (AKU), Karachi Pakistan; 2018
6. **First Prize:** Poster presentation for thesis work in the 18th annual postgraduate medical education (PGME) conference on "Social Accountability in Health Professions Education" 31st May-1st June 2013 at AKU, Karachi Pakistan

7. **First Prize:** Oral presentation on thesis work at the 3rd annual public health conference on "Social Determinants of Health: Issues and Challenges", 3rd – 4th December 2012-Health Services Academy Islamabad Pakistan.
8. **Scholarship of US \$13,633** from the **USA Government, NIH-funded capacity development project** to support Masters in Epidemiology and Biostatistics.
9. **Scholarship** (50% loan and 50% scholarship) of US \$ 2336 by **Aga Khan Education Service Pakistan** to support MBBS degree.

DATA ANALYSIS SOFTWARE SKILLS

1. SAS (Used throughout my PhD program, conducted data analysis for PhD dissertation, and helped masters' students to learn SAS at Columbia University)
2. R (Used for instrumental variable analysis, causal mediation analysis, and meta-analysis for PhD dissertation)
3. SPSS (Have been using since 2010 for various research projects)
4. INVIVO (Used to analyze data of qualitative papers)
5. GIS (Used during my master's thesis in 2012)

RESEARCH PROJECTS/GRANTS

1. **Women First (Preconception Maternal Nutrition) Study-** 2013 to 2020; US\$ 1497670.1
 - Women First Primary Study (Preconception until Birth)
 - Women First Follow-up Study (Birth-24 months old babies)
 - Women First Neurodevelopment Study (24 months old babies)
 - Women First Genome-Wide Association Study (Epigenetic study to assess the role of parental genes in offspring growth)
 - Women First Anemia Study: A mixed method study on maternal anemia in Rural Pakistan

Role: Principal Investigator (Pakistan site); **Funded by:** Bill and Melinda Gates Foundation
Scope: A multi-Country randomized, non-masked, controlled trial to ascertain the benefits of ensuring optimal maternal nutrition before conception and providing an evidence base for programmatic priority directed to minimizing the risk of malnutrition in females of reproductive age in Pakistan, India, Guatemala, and the Democratic Republic of Congo.
<http://www.clinicaltrials.gov/ct2/show/NCT01883193?id=NCT01883193&rank=1>
2. A health system situation analysis on maternal and child health in Pakistan- 2018- 2019. US\$ 149,973
Role: Principal Investigator; **Funded by:** United Nations Children's Fund (UNICEF)
Scope: Assessing the service readiness and quality of maternal and newborn care in health care facilities and analyzes data on stillbirths, neonatal deaths, and maternal mortality across Pakistan
3. Monitoring coverage & data quality of birth registry using lot quality assurance sampling (LQAS): a pilot study. 2017-2019; US\$ 10028.0751
Role: Co-Investigator; **Funded by:** Aga Khan University, Karachi Pakistan
4. Out-of-pocket expenditure of vaginal delivery and cesarean section in public and private hospitals of Karachi, Pakistan. 2017-2018; US\$ 5995.43
Role: Principal Investigator; **Funded by:** Aga Khan University Research Council
5. Antenatal corticosteroid Trial (ACT); 2012 – 2014; US\$ 221,698
Role: Co-Investigator; **Funded by:** National Institute of Child Health and Human Development
Scope: A multi-country, community-based cluster trial to evaluate whether a cluster-level multifaceted intervention, including components to improve the identification of pregnancies at

high risk of preterm birth and providing and facilitating the appropriate use of steroids, reduces neonatal mortality at 28 days of life in preterm newborns, compared with the standard delivery of care in Africa, Asia, and Latin America.

6. Third-party evaluation of measles supplementary immunization activity in Sindh, Pakistan- April to August 2014; US\$ 193,914
Role: Co-Investigator; **Funded by:** GAVI Alliance, WHO, Japan International Cooperation Agency (JICA) and Measles-Rubella Initiative
Scope: A cluster survey to evaluate the coverage achieved by a supplementary immunization activity for measles carried out by the Expanded Program for Immunization of the Government of Sindh, Pakistan- May 2014.
7. Leadership in Family Planning and Reproductive Health Project Aga Khan University Karachi, Pakistan
Oct 2012 –March 2013; US\$ 400,000
Role: Research Coordinator; **Funded by:** David and Lucile Packard Foundation
Scope: A training grant to build the capacity of Government officials for improving Reproductive Health and Family planning outcomes in Pakistan.

SCHOLARLY PUBLICATIONS IN PEER-REVIEWED JOURNALS

90 Papers altogether since 2013: 32 as the First Author

Google scholar index: 2377 citations; h-index= 23; and i10-index= 39

<https://scholar.google.com/citations?user=FcF2H1UAAAAJ&hl=e>

link to publications in PubMed

<https://www.ncbi.nlm.nih.gov/myncbi/sumera.i.1/bibliography/public/>

1. Waldrop S., Chowdhury, D., Westcott JL, Biasini F, Garcés A, Figueroa L, Tshetu A, Lokangaka AL, Bauserman M, Saleem S, **Aziz Ali S**, Goldenberg RL, Goudar SS, Dhaded SM, Derman RJ, KempJF, Koso-Thomas M, Das A, Hambidge KM, and Krebs NF. Anthropometric and sociodemographic variables, but not preconception or prenatal maternal nutrition supplementation, predict neurodevelopment in offspring of the ‘Women First’ trial. *Matern Child Nutr.* 2024 Jul 23: e13703. doi: 10.1111/mcn.13703. PMID: 39044360
2. **Aziz Ali S**, Aziz S, Khowaja N, Rehman FU. Role of iron therapy and hematology in re-conceptualizing chlorosis to hypochromic anemia: A historical perspective. *Int Jr Infect Dis & Epidemiology.* 2024 Apr ;5(1):1-7. doi: 10.51626/ijide.2024.05.00054
3. KempJF, Hambidge KM, Westcott JL, **Aziz Ali S**, Saleem S, Garcés A, Figueroa L, Somannavar M, Goudar SS, Long JM, Hendricks AE, Krebs NF, and the Women First Preconception Maternal Nutrition Trial Group. Zinc supplementation initiated prior to or during pregnancy modestly impacted maternal status and high prevalence of hypozincemia in pregnancy and lactation: the Women First Preconception Maternal Nutrition Trial. *J Nutr.* 2024 Apr 13: S0022-3166(24)00221-9. doi: 10.1016/j.tjnut.2024.04.018. PMID: 38621624
4. Long JM, Gatica-Domínguez G, Westcott JL, Taren D, Tejeda G, Diba TS, Mastiholi SC, Khan US, Garcés A, Figueroa L, Lokangaka A, Goudar SS, **Aziz Ali S**, Hambidge KM, Krebs NF; Women First Preconception Maternal Nutrition Study Group and the Women First Preconception Maternal Nutrition Study Group. Infant and young child feeding indicators are positively associated with length and Family Care Indicators in the children of the Women First trial participants. *Matern Child Nutr.* 2024 Jan 20: e13572. doi: 10.1111/mcn.13572. PMID: 37817452 PMCID: PMC10750017

5. **Aziz Ali S**, Razzaq S, Aziz S, Allana A, Aziz Ali A, Naeem S, Khowaja N and Rehman FU. Role of iron in the reduction of anemia among women of reproductive age in low-middle income countries: insights from systematic review and meta-analysis. *BMC Women's Health*. 2023 Apr 17;23(1):184. doi: 10.1186/s12905-023-02291-6. PubMed PMID: 37069552; PMCID: PMC10111688
6. Shankar K, **Aziz Ali S**, Ruebel ML, Jessani S, Borengasser SJ, Gilley SP, Jambal P, Yazza DN, Weaver N, Kemp JF, Westcott JL, Hendricks AE, Saleem S, Goldenberg RL, Hambidge KM, Krebs NF. Maternal nutritional status modifies heat-associated growth restriction in women with chronic malnutrition. *PNAS Nexus*. 2023 Jan 27;2(1): pgac309. doi: 10.1093/pnasnexus/pgac309. PubMed PMID: 36744021; PMCID: PMC9896899.
7. Fernandes M*, Krebs NF*, Westcott JL, Tshetu A, Lokangaka A, Bauserman M, Garcés AL, Figueroa L, Saleem S, **Aziz Ali S**, Goldenberg RL, Goudar SS, Dhaded SM, Derman RJ, KempJF, Koso-Thomas M, Sridhar A, McClure EM, Hambidge KM, and the Women First Preconception Trial Study Group. Neurodevelopment, vision and auditory outcomes at age 2 years in offspring of participants in the 'Women First' maternal preconception nutrition randomized controlled trial. *Arch Dis Child*. 2023 Aug;108(8):622-631. doi: 10.1136/archdischild-2023-325352. PMID: 37142335 PMCID: PMC10423475. *[co-first authors]
8. **Krebs NF**, Hambidge KM, Westcott JL, Garcés AL, Figueroa L, Tshetu AK, Lokangaka AL, Goudar SS, Dhaded SM, Saleem S, **Aziz Ali S**, Bauserman MS, Derman RJ, Goldenberg RL, Das A, Chowdhury D, and the Women First Preconception Maternal Nutrition Study Group. Birth length is the strongest predictor of linear growth status and stunting in the first 2 years of life after a preconception maternal nutrition intervention: the children of the Women First trial. *Am J Clin Nutr*. 2022 Jul 6;116(1):86-96. Doi: 10.1093/ajcn/nqac051. PMID: 35681255. PMCID: PMC9257468
9. Pradhan NA, **Aziz Ali S**, Roujani S, Ali A, Hussain SS, Rizwan S, Ariff S, Saleem S, and Siddiqi S. Quality of care assessment for small and sick newborns and young infants in Pakistan: findings from a cross-sectional study. *BMC Pediatr*. 2022 Jan 29;22(1):68. doi: 10.1186/s12887-022-03108-5. PMID: 35093035; PMCID: PMC8800326
10. Tang M, Weaver NE, Frank DN, Ir D, Robertson CE, Kemp JF, Westcott J, Shankar K, Garces AL, Figueroa L, Tshetu AK, Lokangaka AL, Goudar SS, Somannavar M, **Aziz Ali S**, Saleem S, McClure EM, Hambidge KM, Hendricks AE, Krebs NF, and the Women First Study Group. Longitudinal Reduction in Diversity of Maternal Gut Microbiota during Pregnancy Is Observed in Multiple Low-Resource Settings: Results from the Women First Trial. *Front Microbiol*. 2022 Aug 1;13:823757. doi: 10.3389/fmicb.2022.823757. PMID: 35979501; PMCID: PMC9376441
11. **Aziz Ali S**, Feroz A, Abbasi Z, Allana A, Hambidge KM, Krebs NF, Westcott JE, McClure EM, Goldenberg RL, Saleem S. Perceptions of women, their husbands and healthcare providers about anemia in rural Pakistan: Findings from a qualitative exploratory study. *PLoS One*. 2021 Apr 27;16(4): e0249360. doi: 10.1371/journal.pone.0249360. PMID: 33905421 PMCID: PMC8078764
12. **Aziz Ali S**, Razzaq S, Khowaja N, Gutkind S, Raheman FU, Nadir S. Predictors of iron consumption for at least 90 days during pregnancy: Findings from National Demographic Health Survey, Pakistan (2017–2018). *BMC Pregnancy and Childbirth*. 2021 May 3;21(1):352. doi: 10.1186/s12884-021-03825-2. PMID: 33941108; PMCID: PMC8091661
13. Bauserman MS, Bann CM, Hambidge KM, Garces AL, Figueroa L, Westcott JL, Patterson JK, McClure EM, Thorsten VR, **Aziz Ali S**, Saleem S, Goldenberg RL, Derman RJ, Herekar V, Somannavar M, Koso-Thomas MW, Lokangaka AL, Tshetu AK, Krebs NF†, Carl L. Bose†, and the Women First Preconception Trial Study Group*. Gestational weight gain in four low- and middle-income countries and associations with birth outcomes: a secondary analysis of women in

- the Women First Trial. († co-Sr. Authors). *Am J Clin Nutr.* 2021 Aug 2;114(2):804-812. doi: 10.1093/ajcn/nqab086. PMID: 33876178; PMCID: PMC8326045
14. Young BE, Westcott J, Kemp J, Allan L, Hampel D, Garces AL, Figueroa L, Goudar SS, Dhaded SM, Saleem S, **Aziz Ali S**, Hambidge M, Krebs NF and WF Working Group. B-Vitamins and choline in human milk are not impacted by a prenatal lipid-based nutrient supplement (LNS) but differ among three low-to-middle income settings-findings from the Women First trial. *Front Nutr.* 2021 Dec 23; 8:750680. doi: 10.3389/fnut.2021.750680. eCollection 2021. PMID: 35004801; PMCID: PMC8733746
 15. Pradhan NA, Ali A, Roujani S, **Aziz Ali S**, Rizwan S, Saleem S, and Siddiqi S. Quality of inpatient care of small and sick newborns in Pakistan: perceptions of key stakeholders. *BMC Pediatr.* 2021 Sep 10;21(1):396. doi: 10.1186/s12887-021-02850-6. PMID: 34507530; PMCID: PMC8429883
 16. Razzaq S, Jessani S, **Aziz Ali S**, Abbasi Z, Saleem S. Desire to limiting childbirth and the associated determinants among married females: Sukh Survey-Karachi, Pakistan. *J Pak Med Assoc.* 2021 Nov;71 (Suppl 7) (11): S70-S77. PMID: 34793433
 17. Castillo-Castrejon M, Yang IV, Davidson EJ, Borengasser SJ, Jambal P, Westcott J, Kemp J, Garces A, **Aziz Ali S**, Figueroa L, Hambidge KM, Krebs NF, Powell TL. Pre-conceptional lipid-based nutrient supplementation in two low-resource countries results in distinctly different IGF-1/mTOR placental responses. *J Nutr.* 2021 Mar 11;151(3):556-569. doi: 10.1093/jn/nxaa354. PMID: 33382407; PMCID: PMC7948206
 18. Rehman FU, Ahmed MA, Aziz K, Ashraf MJ, Amber T, and **Aziz Ali S**. Sociodemographic, Clinical Characteristics and Outcomes of Influenza Pneumonia Patients Admitted in a Tertiary Care Hospital in Karachi, Pakistan: Findings from a Cross-sectional Study. *J Coll Physicians Surg Pak.* 2021 Mar;31(3):322-325. doi: 10.29271/jcpsp.2021.03.322. PMID: 33775024
 19. Young AE, Kemp JF, Uhlson C, Westcott JL, **Aziz Ali S**, Saleem S, Garces A, Figueroa L, Somannavar MS, Goudar SS, Hambidge KM, Hendricks AE, Krebs NF and the Women First Preconception Maternal Nutrition Trial Group. Improved maternal iodine status during first trimester gestation with preconception nutrition supplementation: The Women First Preconception Maternal Nutrition Trial. *Matern Child Nutr.* 2021 Oct;17(4): e13204. doi: 10.1111/mcn.13204. PMID: 34036728; PMCID: PMC8476419
 20. Krebs NF, Hambidge KM, Westcott JL, Garcés A, Figueroa L, Tsefu A, Lokangaka A, Goudar S, Dhaded S, Saleem S, **Aziz Ali S**, Bose C, Derman R, Goldenberg RL, Thorsten V, Sridhar A, Chowdhury D, Das A. Growth from birth through six months for infants of mothers in the preconception maternal nutrition intervention: the Women First Trial. *J Pediatr.* 2021 Feb; 229:199-206.e4. doi: 10.1016/j.jpeds.2020.09.03. PMID: 32956698; PMCID: PMC7855785
 21. **Aziz Ali S**, Khan U, Abrejo F, Vollmer B, Saleem S, Hambidge MK, Krebs NF, Westcott JE, Goldenberg RL, McClure EM, Pasha O. Use of smokeless tobacco before conception and its relationship with maternal and fetal outcomes of pregnancy in Thatta, Pakistan: Findings from Women First study. *Nicotine Tob Res.* 2021 Aug 4;23(8):1291-1299. doi: 10.1093/ntr/ntaa215. PMID: 33084903; PMCID: PMC8360631
 22. **Aziz Ali S**, Tikmani SS, Saleem S, Patel S, Hibberd PL, Goudar SS, Dhaded S, Derman RJ, Moore JL, McClure EM, Goldenberg RL. Hemoglobin concentrations and adverse birth outcomes in South Asian pregnant women: findings from a prospective Maternal and Neonatal Health Registry. *Reprod Health.* 2020 Nov 30;17(Suppl 2):154. doi: 10.1186/s12978-020-01006-6. PMID: 33256770; PMCID: PMC7706196
 23. **Aziz Ali S**, Abbasi Z, Shahid B, Moin G, Hambidge KM, Krebs NF, Westcott JE, McClure EM, Goldenberg RL, Saleem S. Prevalence and determinants of anemia among women of reproductive age in Thatta Pakistan: Findings from a cross-sectional study. *PLoS One.* 2020 Sep 24;15(9):e0239320. doi: 10.1371/journal.pone.0239320. eCollection 2020. PMID: 32970719; PMCID: PMC7514090

24. **Aziz Ali S**, Razzaq S, Tikmani SS, Allana A, Rizvi N, Saleem S. Determinants of under-nutrition among women of reproductive age in Sindh, Pakistan: Findings from Pakistan Demographic and Health Survey, 2012-2013. *Population Medicine*. 2020;2 (August):26
25. **Aziz Ali S**, Aziz S, Feroz A, Saleem S, Fatmi Z, Kadir MM. Factors affecting the utilization of antenatal care among married women of reproductive age in the rural Thatta, Pakistan: Findings from a community-based case-control study. *BMC Pregnancy Childbirth*. 2020 Jun 10;20(1):355. doi: 10.1186/s12884-020-03009-4. PMID: 32522258 PMCID: PMC7288520
26. Dhaded SM, Hambidge KM, **Aziz Ali S**, Somannavar M, Saleem S, Pasha O, Khan U, Herekar V, Vernekar S, Kumar Y, Westcott JE, Thorsten VR, Sridhar A, Das A, McCure E, Derman RJ, Goldenberg RL, Koso-Thomas M, Goudar SS, Krebs NF. Preconception nutrition intervention improved birth length and reduced stunting and wasting in newborns in South Asia: The Women First Randomized Controlled Trial. *PLoS One*. 2020 Jan 29;15(1): e0218960. doi: 10.1371/journal.pone.0218960. eCollection 2020. PMID: 31995570; PMCID: PMC6988936
27. Rehman FU, Farukh OS, Fatima M, Imran A, Bakhtawar A, **Aziz Ali S**. Electrolyte Imbalance at Admission Does Not Predict the Length of Stay or Mortality in Dengue-Infected Patients. *Cureus*. 2020 Sep 13;12(9):e10419. doi: 10.7759/cureus.10419. PMID: 33062534; PMCID: PMC7553718
28. **Aziz Ali S**, Khan U, and Feroz A. Prevalence and Determinants of Anemia among Women of Reproductive Age in Developing Countries. *J Coll Physicians Surg Pak*. 2020 Feb;30(2):177-186. doi: 10.29271/jcpsp.2020.02.177. PMID: 32036827
29. Aziz S, Allana A, and **Aziz Ali S**. Exploring the notion of technologically dependent children: Findings from a review of literature. *Int. J. Nurs. Educ. Scholarsh. (IJNSS)*. 7, 2020
30. Hambidge KM, Bann C, McClure E, Westcott JE, Garces A, Figueroa L, Goudar SS, Dhaded S, Pasha O, **Aziz Ali S**, Derman RJ, Goldenberg RL, Koso-Thomas M, Somannavar MS, Herekar V, Khan U, Krebs NF. Maternal Characteristics Affect Fetal Growth Response to Maternal Supplements in the Women First Preconception Trial. *Nutrients*. 2019 Oct 21;11(10):2534. doi: 10.3390/nu11102534. PMID: 31640153; PMCID: PMC6835723
31. **Aziz Ali S**, Khan U, Saleem S, Krebs NF, Hambidge KM, Westcott JE, Goldenberg RL, McClure EM, and Pasha O. Challenges of implementing ‘Women First (Preconception maternal nutrition)’ study in a rural study Site of Pakistan along with innovative strategies. *Nutr Metab Insights*. 2019 Jul 4; 21:1178638819852059. doi: 10.1177/1178638819852059. eCollection 2019. PMID: 31320804; PMCID: PMC6611011
32. **Aziz Ali S**, Abbasi Z, Feroz A, Hambidge KM, Krebs NF, Westcott JE, Saleem S. Factors associated with anemia among women of the reproductive age group in Thatta district: study protocol. *Reprod Health*. 2019 Mar 18;16(1):34. doi: 10.1186/s12978-019-0688-7. PMID: 30885226; PMCID: PMC6423857
33. Dreen G, Rehman FU, **Aziz Ali S**, and Aziz S. Deep venous thrombosis in a patient with acquired factor VIII deficiency: a case report. *International medicine*. 2019 July; 1(4): 241-243. DOI: 10.5455/im.302644370.
34. Lander R, Hambidge KM, Westcott JE, Garces A, Figueroa L, Tejeda G, Tshetu A, Lokangaka A, Diba TS, Goudar SS, Somannavar M, Mastiholi SC, **Aziz Ali S**, Saleem S, Khan US, McClure EM, Krebs NF. Pregnant Women in Four Low-Middle Income Countries Have a High Prevalence of Inadequate Dietary Intakes That Are Improved by Dietary Diversity. *Nutrients*. 2019 Jul 10;11(7):1560. doi: 10.3390/nu11071560. PMID: 31295916; PMCID: PMC6682861
35. Anam F, Abrejo F, **Aziz Ali S**, Nuruddin R, Saleem S. Using mobile phones to improve young people’s sexual and reproductive health in low- and middle-income countries: a systematic review protocol to identify barriers, facilitators and reported interventions. *Syst Rev*. 2019 May 18;8(1):117. doi: 10.1186/s13643-019-1033-5. 2019;8(1):117. PMID: 31103044; PMCID: PMC6525977

36. Rehman FU, Zain MM, Baqi A, Muzammil M, and **Aziz Ali S**. Cholestyramine, A Cost-Effective Yet Efficacious Anti-Dote in Digoxin Toxicity. *International Research Journal of Pharmacy and Medical Sciences (IRJPMS)*, 2019; 2 (4): 8-10.
37. Tikmani SS, **Aziz Ali S**, Sayyeda R and Tikmani P: A prevalence of hepatitis C in pregnant women of Pakistan: a systematic review. *I manger Journal of nursing*. 2019
38. Aziz S, Suhail N, Rehman FU, Feroz A, Hussain SS, Abbasi Z, Razzaq S, **Aziz Ali S**. Factors Affecting the Utilization of Cervical Cancer Screening among Women: A Literature Review Using Ishikawa Diagram. *EC Gynaecology* 8.5 (2019).
39. Tikmani SS, **Aziz Ali S**, Saleem S, Bann CM, Mwenechanya M, Carlo WA, Figueroa L, Garces AL, Krebs NF, Patel A, Hibberd PL, Goudar SS, Derman RJ, Aziz A, Marete I, Tenge C, Esamai F, Liechty E, Bucher S, Moore JL, McClure EM, Goldenberg RL. Trends of antenatal care during pregnancy in low-and middle-income countries: Findings from the Global Network Maternal and Newborn Health Registry. *Semin Perinatol*. 2019 Aug;43(5):297-307. doi: 10.1053/j.semperi.2019.03.020. PMID: 31005357; PMCID: PMC7027164
40. **Aziz Ali S**, Aziz S, and Bano G. Role of Fish Oil in preventing cardiovascular diseases. *Health Science Journal* 13, no. 1:622 (2019). DOI: 10.21767/1791-809X.1000622
41. Hambidge KM, Westcott JE, Garcés A, Figueroa L, Goudar SS, Dhaded SM, Pasha O, **Aziz Ali S**, Tshefu A, Lokangaka A, Derman RJ, Goldenberg RL, Bose CL, Bauserman M, Koso-Thomas M, Thorsten VR, Stolka K, Das A, McClure EM, Krebs NF on behalf of the Women First Preconception Trial Study Group. A multi-country randomized controlled trial of a maternal nutrition supplement-initiated preconception versus early gestation: The Women First Trial. *Am J Clin Nutr*. 2019 Feb 1;109(2):457-469. doi: 10.1093/ajcn/nqy228. PMID: 30721941
42. Parks S, Hoffman K. Matthew, Goudar SS, Patel A, Saleem S, **Aziz Ali S**, Goldenberg RL, Hibberd PL, Moore JM, Wallace D, McClure EM, Derman RJ. Maternal anemia and maternal, fetal, and neonatal outcomes in a prospective cohort study in India and Pakistan. *BJOG*. 2019 May;126(6):737-743. doi: 10.1111/1471-0528.15585. PMID: 30554474; PMCID: PMC6459713
43. Harrison MS, Saleem S, **Aziz Ali S**, Pasha O, Chomba E, Carlo WA, Garces AL, Krebs NF, Hambidge KM, Goudar SS, Dhaded SM, Kodkany B, Derman RJ, Patel A, Hibberd PL, Esamai F, Liechty EA, Tshefu A, Lokangaka A, Bauserman M, Bose CL, Althabe F, Belizan JM, Buekens P, Moore JL, Wallace DD, Miodovnik M, Koso-Thomas M, McClure EM, Goldenberg RL. A Prospective, Population-Based Study of Trends in Operative Vaginal Delivery Compared to Cesarean Delivery Rates in Low- and Middle-Income Countries, 2010-2016. *Am J Perinatol*. 2019 Jun;36(7):730-736. doi: 10.1055/s-0038-1673656. PMID: 30372772; PMCID: PMC6488442
44. **Aziz Ali S**, Razzaq S, Tahir HN, Ali Y, Tikmani SS, and Fatmi Z. Polio End Game: Simple Strategies to Eradicate Polio from Pakistan. *I-Manager's Journal on Nursing* 8, no. 3 (2018): 11.
45. Bano G, Aziz S, **Aziz Ali S**. Cured Meat as a Potential Risk Factor of Chronic Obstructive Pulmonary Disease. *Journal of Community Medicine & Health Education* 8: 637 (2018). doi:10.4172/2161-0711.1000637
46. Tikmani SS, **Aziz Ali S**, Feroz A, Saleem S. Ensuring Quality in a Surveillance System for Maternal and Newborn Health: A Proposed Study Protocol. *I-Manager's Journal on Nursing* 8, no. 3 (2018): 17.
47. Bano G, Aziz S, Suhail N, **Aziz Ali S**. Socio-Cultural Factors Affecting the Treatment of Breast Cancer among Pakistani Women and Potential Strategies to Prevent Breast Cancer: A Narrative Review. *Open Access Journal of Reproductive System and Sexual Disorders* 2(1) (2018) - 2018. OAJRSD. MS.ID.000126.
48. **Aziz Ali S**, Dero AA, Aziz S, Bano G. Factors affecting the utilization of antenatal care among pregnant women: A literature review. *Journal of Pregnancy and Neonatal Medicine* 2018; 2(2):41-45.
49. Saleem S, Tikmani SS, McClure EM, Moore J, Azam SI, Goudar SS, Garces A, Figueroa L, Tenge C, Esamai F, Patel AB, **Aziz Ali S**, Naqvi F, Mwenechanya M; Chomba E, Carlo WA,

- Derman RJ, Hibberd PL, Bucher S, Liechty EA, Krebs NF, Hambidge KM, Wallace D, Koso-Thomas M, Miodovnik M, Goldenberg RL. Trends and Determinants of Stillbirth in Developing Countries: Results from the Global Network's Population-Based Birth Registry. *Reprod Health*. 2018 Jun 22;15(Suppl 1):100. doi: 10.1186/s12978-018-0526-3. PMID: 29945647; PMCID: PMC6019981
50. Khan QQA, Siddiqui A, Zaman M, Waqar A, **Aziz Ali S**. Profile of dementia patients from a tertiary care center in Karachi, Pakistan. *Pakistan Journal of Neurological Sciences (PJNS)* 13, no. 2 (2018): 11-16.
 51. **Aziz Ali S**, Tikmani SS, Harrison MA, Saleem S, Goldenberg RL, McClure EM, Pasha O. Pregnancy outcomes among women with an unintended pregnancy: Findings from a Prospective Registry in Rural Pakistan. *EC Gynecology* 7.2 (2018): 57-67.
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 55. **Aziz Ali S** and Rabbani U. Unintended pregnancies among married women in Sindh Pakistan: Role of Lady Health Workers. *EC Gynecology* 6.4 (2017): 120-127.
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90. Aziz S and **Aziz Ali S**. Child sexual abuse leads to psychological disorders: A literature review. *Elective Medicine Journal* 2, no. 4 (2014): 430-432

PUBLISHED BOOKS

1. **Aziz Ali S**, Aziz S and Nadir S. Anemia among women of reproductive age: A hidden misery: Maternal anemia: A preventable cause of mortality in the developing world. Eliva Press (2020).
2. Khan US, **Aziz Ali S**, Abrejo F, Krebs NF, Hambidge K, Westcott JL, Lander RL, Goldenberg RL, McClure EM, Saleem S, and Pasha O. "Generic Recipes & Food Composition Table of Thatta, Sindh, Pakistan", ISBN-969-8073, IMAGE (2020).

PUBLISHED ABSTRACTS

1. Shankar Kartik, **Ali Sumera Aziz**, Jessani Saleem, Kemp L. Jennifer, Westcott Jamie, Saleem Sarah, Wylie J. Blair, Goldenberg L. Robert, Nancy F Krebs. Associations Between Heat Exposure in Early Pregnancy and Anemia, Inflammation and Iron Status Among Women in Rural Pakistan. *Current Developments in Nutrition*, no. 8, Supplement_2 (2024): 570-570. <https://doi.org/10.1016/j.cdnut.2024.102305>
2. **Ali Sumera Aziz**, Kahe Ka, Genkinger Jeanine, Valeri Linda, Saleem Sarah, Jessani Saleem, Robert L Goldenberg, Jamie Westcott, Jennifer Kemp, Ana L. Garcés, Lester Figueroa, Shivaprasad S Goudar, Sangappa M Dhaded, Richard Derman, Antoinette Tshetu, Adrien L Lokangaka, Melissa S Bauserman, Elizabeth M. McClure, Louise Kuhn, Nancy F Krebs. "Nutrition supplements should target women with specific pre-pregnancy hemoglobin cut-offs to obtain the greatest benefits for intrauterine growth: Women First Preconception Nutrition Trial". Micronutrient Forum 6th Global Conference (2023).
3. **Ali Sumera Aziz**, Kahe Ka, Genkinger Jeanine, Valeri Linda, Saleem Sarah, Jessani Saleem, Robert L Goldenberg, Jamie Westcott, Jennifer Kemp, Ana L. Garcés, Lester Figueroa, Shivaprasad S Goudar, Sangappa M Dhaded, Richard Derman, Antoinette Tshetu, Adrien L Lokangaka, Melissa S Bauserman, Elizabeth M. McClure, Louise Kuhn, Nancy F Krebs. "Hemoglobin during pregnancy does not mediate the relationship between nutrition supplements and intrauterine growth: Women First Preconception Nutrition Trial". Micronutrient Forum 6th Global Conference (2023).
4. Shankar Kartik, **Ali Sumera Aziz**, Bridget Young, Saleem Jessani, Stephanie P Gilley¹, Jennifer Kemp¹, Jamie Westcott¹, Lars Bode, Sarah Saleem, Robert L Goldenberg, K Michael Hambidge, Nancy F Krebs "Seasonal and Ambient Temperature-Associated Changes in Human Milk Constituents Among Women in Rural Pakistan". American Society for Nutrition meeting (Nutrition 2023).
5. Glime, G., Garces, A., Figueroa, L., Tshetu, A., Lokangaka, A., Goudar, S., Dhaded, S., Saleem, **Ali Sumera Aziz**, S.A., Kemp, J. and Westcott, J. "Comparison of Toddler Crown Rump Length and Leg Length in Four Low-and Middle-Income Research Sites: The Women First Trial". *Current Developments in Nutrition* 6, no. Supplement_1 (2022): 570-570.
6. Hambidge K. Michael, Bann Carla, McClure Elizabeth, Westcott E. Jamie, Garcés Ana, Dhaded M Sangappa, **Ali Sumera Aziz**, Krebs F. Nancy, and the Women First Preconception Nutrition Trial Group. "Maternal Characteristics Affect Fetal Growth Response to Maternal Supplements in the Women First Preconception Trial (WF) (P10-017-19)". *Current Developments in Nutrition*, no. 13 (2019).
7. Krebs Nancy, Hambidge Michael, Westcott Jamie, Garces Ana, Lokangaka Adrien, Dhaded Sangappa, **Ali Sumera Aziz**, Thorsten Vanessa, Sridhar Amaanti, Chowdhury Dhuly and the Women First Preconception Nutrition Trial Group. "Differences in Birth Size Associated with Preconception Maternal Nutrition Intervention Persist in Postnatal Growth Through 6 Months (OR10-05-19)". *Current Developments in Nutrition*, no. 13 (2019).
8. **Ali Sumera Aziz**, Hambidge K. Michael, Krebs F. Nancy, and the Women First Preconception Nutrition Trial Group. "Women First Preconception Nutrition Trial: Effects of Maternal Nutrition Supplements Commencing before Conception or in Early Gestation on Newborn Size in Rural Pakistan (P12-007)". *Current Developments in Nutrition*, no. 11 (2018).
9. Hambidge K. Michael, Krebs F Nancy, Garcés Ana, Figueroa Lester, **Ali Sumera Aziz**, Pasha Omrana, Goudar S. Shivaprasad, Dhaded M Sangappa, Srihard Amaanti, Thorsten R Vanessa, and the Women First Nutrition Trial Group. "Small-for-Gestational-Age in the Women First Preconception Trial: Effects of Maternal Nutrition Supplements and Relationship to Other Newborn Outcome Measures (P12-041)". *Current Developments in Nutrition*, no. 11 (2018).
10. Hambidge K. Michael, Krebs F Nancy, Garcés Ana, Figueroa Lester, **Ali Sumera Aziz**, Pasha Omrana, Goudar S. Shivaprasad, Dhaded M Sangappa, Tshetu Antoinette, Lokangaka, Das Abhik, Vanessa R Thorsten, and the Women First Nutrition Trial Group. "Impact of a Preconception Maternal Nutrition Intervention on Birth Length in 4 Low- and Middle-Income

- Countries: The “Women First” Trial (OR08-02)”. *Current Developments in Nutrition* 2, no. 11 (2018).
11. Suhail Nadir, **Ali Sumera Aziz**, Qidwai Waris, Iqbal Saleem, Memon Yousaf, and Kadir Mohammad Masood. "Storage of medicines in pharmacies in a rural district of Sindh, Pakistan." *Journal of Pioneering Medical Sciences* 6, no. 2 (2016).
 12. **Ali Sumera Aziz** and Khuwaja Azrah Bano. "Comparison of transcerebellar diameter in growth-restricted and normal singleton fetuses for the assessment of gestational age: A case-control study." 19th Annual PGME conference on ' *Enhancing Academic Standards for Quality Care* '. May 301-31, 2014. AKU, Karachi Pakistan.
 13. **Ali Sumera Aziz** and Rabbani Unaib. "Association between Lady health worker's visits and Unintended Pregnancies among married women in District Thatta". 19th Annual Postgraduate medical education conference on ' *Enhancing Academic Standards for Quality Care* '. May 301-31, 2014. AKU, Karachi Pakistan.
 14. **Ali Sumera Aziz**, Pasha Omrana, Sami Neelofar, Ahmed Muhammad, Saleem Sarah, Mir Shabar, Rozi Shafquat. "Association between geographic access to working family planning centers and unintended pregnancies among married women in district Thatta Sindh: A nested case-control study". 18th Annual PGME Conference on ' *Social Accountability in Health Professions Education* ', held from 31st May to 1st June 2013. AKU, Karachi Pakistan.
 15. **Ali Sumera Aziz**, Pasha Omrana, Sami Neelofar, Ahmed Muhammad, Saleem Sarah, Mir Shabar, Rozi Shafquat. "Association between geographic access to working family planning centers and unintended pregnancies among married women in district Thatta: A nested case-control study". CHS annual research day on " *Generating knowledge from action* " was held on 22nd February 2013. AKU, Karachi Pakistan.
 16. **Ali Sumera Aziz**, Pasha Omrana, Sami Neelofar, Ahmed Muhammad, Saleem Sarah, Mir Shabar, et al. "Association between geographic access to working Family Planning centers and unintended pregnancies among married women in district Thatta: A nested case-control study". *7th Health sciences research Assembly*, 20th -21st December 2012. AKU, Karachi Pakistan.

TEACHING ASSIGNMENTS

Columbia University

- **Teaching Fellow: Applications of Biology and Pathophysiology in Epidemiology - Sep-Dec 2023**
 - Helped professor to design syllabus for the course.
 - Developed grading rubrics for various assignments
 - Graded final papers and presentations of PhD students.
 - Provide feedback to students on final papers and presentations.
 - Delivered a lecture on females' reproductive system and physiology of pregnancy
- **Teaching Fellow: Master's Thesis - Jan-May 2023**
 - Helped master's students with their thesis work
 - Assisted students with coding in SAS and R.
 - Provide feedback to students on draft sections of a thesis.
 - Assist with translating the course grading rubric into an online Qualtrics survey.
 - Delivered two guest lectures on research proposal, data analysis, and summarizing results
- **Teaching Assistant: Design and Conduct of Observational Epidemiology- Dec-May 2021 and 2022**
 - Facilitated bi-weekly labs on Zoom with a group of master's students.
 - Attended Zoom meetings with the professor to plan and organize the sessions.
 - Assisted in-person and Zoom sessions and helped the students during breakout sessions.

- Hold office hours for students to address their queries.
- Reviewed course material and exams.
- Graded the final exams.
- **Teaching Assistant: Applied Epidemiologic Analysis** - Sept-Dec 2020, 2021, and 2022
 - Attended Zoom meetings with the professor to plan and organize the sessions and labs.
 - Conducted weekly labs on Zoom and in-person with students.
 - Reviewed lab material, homework, practice exercises, and exams.
 - Assisted Zoom sessions and helped the students during breakout sessions.
 - Developed questions for discussion with students.
 - Checked and graded weekly assignments and exams.
- **Teaching Assistant: Field Methods in Epidemiology** - Dec-May 2022
 - Attended Zoom meetings with the instructor to plan and organize the sessions.
 - Helped professor with coursework administration.
 - Reviewed course material (presentations, exercises, assignments, and exams).
 - Delivered sessions to share field experiences from low-middle-income countries.
- **Teaching Assistant: Priorities in Global Health** - Jan-May 2020, 2021, and 2022
 - Attended weekly meetings with the instructor to plan and organize the sessions.
 - Helped students in group exercises for different sessions.
 - Assisted in-person and Zoom sessions and helped the students during breakout sessions.
 - Graded assignments (memos, elevator pitches, letters of intent, and strategic plans).
- **Teaching Assistant: Epidemiology of Mental Health, Trauma, Violence, and Loss in Global South**– Sept-Dec 2021
 - Attend meetings with the instructor to plan and organize the class sessions.
 - Help students in presenting their work in class.
 - Reviewed course material and assignments.
 - Helped professor with coursework.
- **Teaching Assistant for the course on “P8403 Nutritional Epidemiology”** - Sept-Dec 2021
 - Attended meetings with the instructor to plan and organize the sessions.
 - Reviewed course material and exams.
 - Helped students during classroom sessions.
 - Coordinated with professor and helped with coursework.

Aga Khan University- Teaching as a faculty

Master’s and Postgraduate Courses Teaching

- Epidemiology, Biostatistics, and Surveillance (August 2018)
- Demography and Reproductive Health Epidemiology- (Jan-Apr 2018)
- Manuscript writing (November 2017)
- Fundamentals of clinical trials (November 2017)
- Hands-on lot quality assurance sampling (LQAS): April 2017
- Application of Epidemiology and Biostatistics in Public Health (Jan- Jun 2017)
- Journal clubs in research (Jan-Jun 2017)
- Advanced Topics in Clinical Trials- (July-Sept 2016)
- Statistics, data management, analysis, and computer skills (May-Jun 2015)
- Introduction to Public Health Surveillance-(Jan-Mar 2014)

Undergraduate teaching: Problem-based learning facilitator on the following modules

- Immunity & infectious diseases module (Jul-Aug 2014, Jun-July 2018 and 2019)
- Multisystem I module (Sept-Oct 2018)
- Musculoskeletal system module (Nov-Dec 2018)

- Blood module (Feb-March 2017)
- GIT, nutrition & metabolism module (Apr-May 2014)
- Renal module (Aug-Sept 2014 and 2016)
- Infectious Diseases module (May-Aug 2016)
- Multisystem II module (Sept-Oct 2015)
- Endocrinology and Reproduction module (Apr-May 2015, 2016, and 2019)

DISSERTATION AND RESEARCH ADVISING

Aga Khan University, Department of community health sciences:

Master's thesis advising (Students M.Sc. Epidemiology & Biostatistics)

- Seemab Naqvi: Association of delivery care factors with intrapartum stillbirth in women who delivered at ≥ 37 weeks of gestation at tertiary care hospitals of Karachi, Pakistan: A case-control study- 2018-2019
- Rahil Barkat: Factors associated with the termination of exclusive breastfeeding among women within six months after birth residing in Thatta district: A case-control study - 2018-2019
- Farnaz Naqvi: Factors associated with neonatal mortality in facility-based full-term live births surviving till day 28 of life- 2018-2019

Fellowship dissertation advising (postgraduate residents)

- Dr. Vijay Kumar-Resident of Medicine: To determine the precipitating factors associated with diabetic ketoacidosis among adolescents diagnosed with type 1 diabetes mellitus in tertiary care hospital Sukkur Pakistan-2018-2019.
- Dr. Yousaf Ali-Resident of Community Medicine: Out-of-pocket expenditure of vaginal delivery and cesarean section in public and private hospitals of Karachi- 2017-2019.
- Dr. Shama Razzak-Resident of Community Medicine: Supervised her in field-related activities of the 'Woman First Project' for her "Reproductive Health placement" of the Community Medicine Residency program-2017-2018.
- Dr. Sidra Kanwal-Resident of Family Medicine: Supervision for protocol development on the topic titled "Resilience and stress among medical students a cross-sectional survey"-2017
- Dr. Tahira Malik- Resident of Obstetrics and Gynecology: Supervision for protocol development on the topic "To assess the efficacy of intraperitoneal chemotherapy in ovarian cancers: A prospective cohort study"-2015.
- Dr. Adeel Khan- Resident of Community Medicine: Supervised him in field-related activities for his "Reproductive Health Placement" of Community Medicine Residency program-2013.

Elective students (National and International)

- Maruim Navid-An international student: Supervised her during her thesis work and facilitated her understanding of various efforts being made to address maternal morbidity and mortality in rural areas-2015.
- Azzah Hyder- An international student: Supervision for protocol development on the topic: "Attitudes and perceptions regarding sexual health education among young females in Karachi, Pakistan: an exploratory study"-2015.
- A group of elective Students from Dow University of Health Sciences Karachi (2014): Orientation about 'Women First Project' and taught them how to do data analysis on Excel.

TECHNICAL ASSIGNMENTS

- Served as an *expert and facilitator* for "Rural Health Program Thatta Pakistan" to help Government stakeholders in prioritizing infant and childhood-related health issues and

interventions to develop action plans to reduce childhood morbidity and mortality in District Thatta, Pakistan-2018-2019

- Served as *internal examiner* for undergraduate MBBS students' viva examination-2018.
- Reviewed and approved the exam papers of various graduate courses of MSc-Epidemiology and Biostatistics-2016-2019
- Reviewed and approved the exam questions such as MCQs, BCQs, and SAQs of undergraduate and postgraduate teaching programs- AKU Karachi Pakistan-2015-2019.
- Reviewed proposals submitted to the Ethical review board and University Research Council, AKU, Karachi Pakistan.
- Review research articles for journals such as PLOS One, PLOS Global Public Health, BMC Reproductive Health, Hematology, Nicotine and Tobacco research, Bulletin of the World Health Organization, Asian Journal of Research in Medical and Pharmaceutical Sciences, Pakistan Journal of Pharmaceutical Science, and Al Ameen Journal of Medical Sciences, etc.- 2015-till-to-date.
- Organizing Committee member of the 8th Health Sciences Research Assembly at AKU, Karachi. This exercise included the planning and criteria setting for abstract and paper submission in the assembly including review and approval of manuscripts and abstracts for research assembly.

PRESENTATIONS AND GUEST LECTURES

Presentations and Guest Lectures at Mailman School of Public Health Columbia University NYC-USA

- Public Presentation of dissertation work on “Preconception nutrition supplements and intrauterine growth: Exploring mechanism and identifying high-risk groups”- March 8, 2024.
- Guest lecture on "Role of nutrition before and during pregnancy in improving intrauterine growth" for *Perinatal Epidemiology* course- April 17, 2023
- Guest lecture on “challenges of implementing a randomized controlled trial in low-middle income countries" for the course on *Field Methods in Epidemiology*-March 21, 2023
- Presentation of the research proposal and preliminary findings for the master's thesis course - Jan and Feb 2023
- Presented dissertation proposal for the external defense at - Jan 18, 2023

Presentations during research advisory and steering committee (SC) meetings

- Presented qualitative work on “Impact of climate changes on the day-to-day lives of the women and their family members in Thatta Pakistan: Voices of local community research participants” in **National Advisory Child Health and Human Development meeting**- Jan 24-2023
- Presented preliminary findings on U-Shaped distribution of Hemoglobin concentrations and feto-maternal outcomes among women of reproductive age in **SC meeting of Global Network Research Unit** held in **Florida USA** from 22nd - 26th Jan 2019.
- Presented follow-up, updates, progress, planning, and implementation activities of the Women First Preconception Nutrition Project in **SC meeting of Global Network Research Unit** held twice a year in Florida and Washington, USA-2013-2019.
- Presented pilot work of “Women First” and GIS mapping of Thatta District in **SC Meeting of Global Network Research Unit** held in **Washington, the USA** from 23rd - 28th June 2013.

Oral and Poster Presentations in conferences and research assemblies

- Determinants of antenatal care utilization among married women in the rural setting of Sindh, Pakistan: A case-control study” in **Pediatrics Research Day**, AKU, Karachi- Dec 29, 2018
- Use of smokeless tobacco (Guttka) before conception and its relationship with fetal and maternal outcomes among married women of reproductive age in Thatta, Pakistan” in **Pediatrics Research Day**, AKU, Karachi-Dec 29, 2018

- Women First Preconception Nutrition Trial: Effects of maternal nutrition supplements commencing before conception or in early gestation on newborn size in rural Pakistan” in *Pediatrics Research Day*, AKU, Karachi-Dec 29, 2018
- Women First Preconception Nutrition Trial: Effects of maternal nutrition supplements commencing before conception or in early gestation on newborn size in rural Pakistan” in **American Society of Nutrition (ASN) conference** held in **Boston, MA USA-8th - 12th June 2018**
- Presented progress of “Women First- GWAS and Neurodevelopment” project in a research meeting held at **the University of Colorado Denver (UCD) USA- 13-15th June 2018**.
- Predictors of modern contraceptive usage among married women in a rural district of Pakistan. Is physical access to services still a major barrier? - *PGME conference on "Paradigm Shift"*-15-17th October 2016

Poster Presentations in the 10th Health Science Research Assembly from 23rd-24th August 2016 on the following topics:

- Storage of medicines and temperature of community pharmacies in a rural district of Sindh, Pakistan: An exploratory cross-sectional study.
- Perceptions of pharmacy owners and drug inspectors about the storage of medicines at the required temperature inside the pharmacy outlets in rural areas of Sindh, Pakistan.
- Determinants of unintended pregnancy among reproductive-aged women in developing countries: A Narrative Review.
- Prevalence and risk factors for unintended pregnancy: Systematic Review.
- Maternal and newborn outcomes in Pakistan compared to other low and middle-income countries in the Global Network's Maternal Newborn Health Registry: An active, community-based, pregnancy surveillance mechanism.
- Role of cultural and social barriers in the increased burden of Hepatitis B in Pakistan: A Literature review
- Presented MSc Thesis work on "Association between geographic access to working family planning centers and unintended pregnancies among married women in District Thatta: A nested case-control study" at research day entitled '*Generating knowledge from action*' held on 22nd February 2013 at AKU, Karachi Pakistan.
- Presented MSc Thesis work on "Association between geographic access to working family planning centers and unintended pregnancies among married women in district Thatta: A nested case-control study" at 3rd Annual Public **Health Conference on 'Social Determinants of Health: Issues and Challenges in Pakistan'**, held from 3rd – 4th December 2012 at Health Services Academy, Islamabad Pakistan.

PARTICIPATION IN NATIONAL AND INTERNATIONAL MEETINGS

- Participated in Steering Committee Meeting of Global Network Research Unit-2013-2019
- Participated in **Consultative Meeting** on 'Quality of Care for Reproductive, Maternal, Newborn, Child, and Adolescent Health', organized by *UNICEF* and *Sindh Health Care Commission Pakistan*-30th August 2018.
- Participated and organized a dissemination seminar on the research work of Global Network District Thatta in the 17th Biennial International Scientific Conference of the Society of Obstetrics and Gynecologists of Pakistan (**SOGP**)-2018.
- Attended a meeting in Burban, Islamabad Pakistan on ‘way forward for Family Planning’ in March 2013.
- Attended meeting of Pathfinder International one-day event on 'Spacing for Transition' held on February 21, 2013, at Pearl Continental Hotel, Karachi, Pakistan

WORKSHOPS/CONTINUING MEDICAL EDUCATION (CME)

Participation in the following workshops

- “*Stakeholders workshop on interventions priority setting*” for ‘Rural Health Program Thatta’, held in district Thatta Pakistan-Dec 19, 2018.
- “*Stakeholders workshop on health issues priority setting*” for ‘Rural Health Program Thatta’ -Nov 28, 2018.
- “*Research Grants Facilitation Workshop*” held in the AKU, Karachi Pakistan- Jan 16, 2018.
- “*Neurodevelopment training for BSIDIII and INTERNDA*” to assess neurodevelopment outcomes of babies of Women First project, held in the **University of Alabama Birmingham-USA-** Dec 2016
- “*Communication skills*” held in College of Physician and Surgeons Pakistan- 4th-6th Jan 2016.
- “*Small group facilitation skills*” organized by Department for Educational Development and CHS in May 2015.
- “*Biological Sample Collection and anthropometric measurements*” for Women First project, held in the **University of Colorado Denver (UCD)-USA-** 20-22 Jan 2015.
- “*Research Methods*” held in College of Physician and Surgeon Pakistan-June 2014.
- “*Protocol implementation*” for women's first project: **University of Colorado Denver, USA-** October 2013.
- “*Addressing governance, gender, and disasters in a fragile health system*” conducted by Royal Tropical Institute, Amsterdam, the Netherlands-16-26th September 2013.
- “*Service Excellence Competencies (CARR)*” at AKU, Karachi Pakistan -August 16, 2013.
- “*Risk Management*” held on 19th August 2013, at AKU, Karachi Pakistan.
- “*Health Professions Education*” for PBL training- 8-12th Apr 2013.
- “*3rd Annual Emergency Medicine Conference*” (CME credits 7)-March 16, 2013, AKU, Karachi Pakistan.
- “*Resuscitation of Critically Ill Child*”- March 15, 2013, AKU, Karachi Pakistan.
- Participated and organized” *Advocacy Seminar on Family Planning and Reproductive Health*” (CME credits 2)-12th -13th February 2013 at AKU, Karachi Pakistan.
- “*Pediatrics Emergency Care in the Developing World: Setting Priorities*”- Jan 25, 2013, by Child Life Foundation and Aman Foundation in Collaboration with AKU, Karachi Pakistan.
- “*Research Retreat*” (CME credits 1.5) organized by the Department of Emergency Medicine in collaboration with the Department of Continuing Professional Education- Dec 28, 2012.