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Section of Microbiology

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SUMMARY:

Publication	64
Book Chapters	03
Contributions to reports, guidelines, and policy documents:	03

PUBLICATION:**Year 2024:**

1. Daptomycin MICs by Broth Microdilution Method Against *Staphylococcus aureus* in Clinical Specimens: A Cross-Sectional Study from Pakistan. Zeeshan M, Ahmed I, **Irfan S**, Khan MA, and Zafar A. *J Coll Physicians Surg Pak*. 2024 Jan;34(1):27-31. DOI: [10.29271/jcsp.2024.01.27](https://doi.org/10.29271/jcsp.2024.01.27).

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2. Ceftriaxone resistant *Salmonella enterica* serovar Paratyphi A identified in a case of enteric fever: first case report from Pakistan. **Irfan S**, Hasan Z, Qamar F, Ghanchi N, Ashraf J, Kanji A, Razzak S, Greig D, Nair S and Hasan R. *BMC Infect Dis*. 2023 Apr 26;23(1):267. DOI: [10.1186/s12879-023-08152-9](https://doi.org/10.1186/s12879-023-08152-9).

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3. The international and intercontinental spread and expansion of antimicrobial-resistant *Salmonella Typhi*: a genomic epidemiology study. da Silva KE, Tanmoy AM, Pragasam AK, Iqbal J, Sajib MSI, Mutreja A, Veeraraghavan B, Tamrakar D, Qamar FN, Dougan G, Bogoch I, Seidman JC, Shakya J, Vaidya K, Carey ME, Shrestha R, **Irfan S**, Baker S, Luby SP, Cao Y, Dyson ZA, Garrett DO, John J, Kang G, Hooda Y, Saha SK, Saha S, Andrews JR. *Lancet Microbe*. 2022 Jun 21:S2666-5247(22)00093-3. DOI: [10.1016/S2666-5247\(22\)00093-3](https://doi.org/10.1016/S2666-5247(22)00093-3).
4. Incidence of typhoid and paratyphoid fever in Bangladesh, Nepal, and Pakistan: results of the Surveillance for Enteric Fever in Asia Project. Garrett DO, Longley AT, Aiemjoy K, Yousafzai MT, Hemlock C, Yu AT, Vaidya K, Tamrakar D, Saha S, Bogoch II, Date K, Saha S, Islam MS, Sayeed KMI, Bern C, Shakoor S, Dehraj IF, Mehmood J, Sajib MSI, Islam M, Thobani RS, Hotwani A, Rahman N, **Irfan S**, Naga SR, Memon AM, Pradhan S, Iqbal K, Shrestha R, Rahman H, Hasan MM, Qazi SH, Kazi AM, Saddal NS, Jamal R, Hunzai MJ, Hossain T, Marks F, Carter AS, Seidman JC, Qamar FN, Saha SK, Andrews JR and Luby SP. *Lancet Glob Health*. 2022 Jul;10(7):e978-e988. DOI: [10.1016/S2214-109X\(22\)00119-X](https://doi.org/10.1016/S2214-109X(22)00119-X).

5. Field evaluation of typhoid conjugate vaccine in a catch-up campaign among children aged 9 months to 15 years in Sindh, Pakistan. Thobani RS, Yousafzai MT, Sultana S, Kazi AM, Jan M, Rafey A, Khan A, **Irfan S**, Ujjan IU, Brown N, Mårtensson A and Qamar FN. *Vaccine*. 2022 Aug 6;S0264-410X(22)00840-4. DOI: [10.1016/j.vaccine.2022.06.072](https://doi.org/10.1016/j.vaccine.2022.06.072)

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6. Extraintestinal Seeding of Salmonella enterica Serotype Typhi, Pakistan. **Irfan S**, Zeeshan M, Rattani S, Farooqi J, Shakoor S, Hasan R, Zafar A. *Emerg Infect Dis*. 2021 March; 27(3). DOI: [10.3201/eid2703.200464](https://doi.org/10.3201/eid2703.200464).
7. Prevalence and risk factors associated with multi-drug resistant organisms (MDRO) carriage among pediatric patients at the time of admission in a tertiary care hospital of a developing country. Qureshi S, Maria N, Zeeshan M, **Irfan S**, Qamar FN. *BMC Infect Dis*. 2021 June 9;21(1):547. doi: [10.1186/s12879-021-06275-5](https://doi.org/10.1186/s12879-021-06275-5). P
8. Comparison of Beta-D-Glucan levels between Candida auris and other Candida species at the time of candidemia: a retrospective study. Farooqi J, Niamatullah H, **Irfan S**, Zafar A, Malik F, Jabeen K. *Clinical Microbiology and Infection*. <https://doi.org/10.1016/j.cmi.2021.05.031>.

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9. Burden of Culture Confirmed Enteric Fever Cases in Karachi, Pakistan: Surveillance For Enteric Fever in Asia Project (SEAP), 2016–2019. Yousafzai MT, **Irfan S**, Thobani RS, Kazi AM, Hotwani A, Memon AM, Iqbal K, Qazi SH, Saddal NS, Rahman N, Dehraj IF, Hunzai MJ, Mehmood J, Garrett DO, Saha SK, Andrews JR, Luby SP, and Qamar FN. *Clinical Infectious Diseases*. 2020;71 (S3):S214–21. <https://doi.org/10.1093/cid/ciaa1308>
10. Evaluation of diagnostic accuracy and agreement between four phenotypic carbapenemase detection methods using clinical enterobacteriaceae isolates at a diagnostic laboratory of Pakistan. Farooqui F, **Irfan S**. *Journal of Global Infectious Diseases*.
11. Antimicrobial Resistance in Typhoidal Salmonella: Surveillance for Enteric Fever in Asia Project, 2016–2019. Qamar FN, Yousafzai MT, Dehraj IF, Shakoor S, **Irfan S**, Aneeta Hotwani A, et.al. *Clinical Infectious Diseases*. 2020;71(S3):S276–84. <https://doi.org/10.1093/cid/ciaa1323>.
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13. Mobile phones in the orthopedic operating room: Microbial colonization and antimicrobial resistance. Qureshi NQ, Mufarrih SH, Irfan S, Rashid RH, Akbar Jaleel Zubairi AJ, Sadruddin A, Ahmed I, Noordin S. *World J Orthop*. 2020 May 18; 11(5): 252-264. doi: [10.5312/wjo.v11.i5.252](https://doi.org/10.5312/wjo.v11.i5.252).
14. Efforts to improve diagnosis of bacteraemia by reducing blood culture contamination in an emergency department: strategies and outcome. Shaheen N, Zeeshan M, Fasih N, Farooqi J, Jabeen K, **Irfan S**. *J Pak Med Assoc*. 2020 May; 70(5):835-839. DOI: [10.5455/JPMA.12462](https://doi.org/10.5455/JPMA.12462).

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15. Utility of Micro-colony method for evaluation of multidrug resistant tuberculosis patients in Karachi, Pakistan. **Irfan S**, Rao N, Irfan M, Iftikhar I, Azizullah Z, Jabeen K, Hasan R. *IJTLD*. 2019 July; 23(7). DOI: [10.5588/ijtld.18.0600](https://doi.org/10.5588/ijtld.18.0600).
16. Contamination Assessment of Orthodontic Bands after Different Pre-cleaning Methods at Tertiary care hospital Dentistry clinic. Irfan S, **Irfan S**, Ahmad FMI. *Journal of Orthodontics*. 2019 Sep;46(3):220-224. <https://doi.org/10.1177/1465312519855402>.
17. A Case Report on Isolation of Linezolid- and Vancomycin-resistant *Enterococcus faecium* Species from Cerebrospinal Fluid of a Patient Suffering from Ventriculoperitoneal Shunt-associated Meningitis. **Irfan S**, Qamar S. *Cureus*. 2019;11(9): e5631. [doi:10.7759/cureus.563](https://doi.org/10.7759/cureus.563).
18. Antimicrobial susceptibility against metronidazole and carbapenem in clinical anaerobic isolates from Pakistan. Shafquat Y, Jabeen K, Farooqi J, Mehmood K; **Irfan S**, Hasan R; Zafar A. *Antimicrobial Resistance & Infection Control*. 2019 Jun 14; 8:99. DOI: [10.1186/s13756-019-0549-8](https://doi.org/10.1186/s13756-019-0549-8).
19. Microbial Colonization of Pneumatic Tourniquets in the Orthopedic Operating Room. Mufarrih SH, Qureshi NQ, Rashid RH, Ahmed B, **Irfan S**, Zubairi AJ, Noordin S. *Cureus*. 2019 Aug 2;11(8): e5308. DOI: [10.7759/cureus.5308](https://doi.org/10.7759/cureus.5308).
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23. Diagnostic Accuracy of the Carba NP in Clinical Isolates at a Tertiary Care Centre from Pakistan – a cross sectional study. Farooqi F, **Irfan S**. *Infectious Diseases Journal of Pakistan*. 2019 April – June; 28(02). <https://www.mmids.com/wp-content/uploads/2020/02/IDJ-Pages-Apr-Jun-2019.pdf>.

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25. Antimicrobial susceptibility and clinical characteristics of *Nocardia* isolates from a tertiary care centre diagnostic laboratory in Pakistan. Farooqi F, **Irfan S**, Shakoor S, Zafar A. *J Glob Antimicrob Resist*. 2018 Dec 6;15:219-221. Epub 2018 Jul 6. DOI: [10.1016/j.jgar.2018.06.021](https://doi.org/10.1016/j.jgar.2018.06.021).

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28. Pelvic abscess caused by a slow growing anaerobic bacterium, Eggerthella lenta: First case report from Pakistan. Mal PB, Rafiq I, Iftikhar I, **Irfan S**. J Pak Med Assoc. 2017 October; 67:1604-5.
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34. In-vitro Evaluation of Penicillin and Ceftriaxone resistance amongst Streptococcus pneumoniae isolates causing meningitis, a cross sectional study at The Aga Khan University Hospital Clinical Laboratory Karachi, Pakistan. Kumar H, **Irfan S**, Farooqui J, Naima Fasih N, Zafar A. Infectious Diseases Journal of Pakistan. Jul - Sep 2015; 24 (03); 842-45.

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41. Fluoroquinolone and macrolide co-resistance in clinical isolates of *Campylobacter* species: a 15-year study in Karachi, Pakistan. **Irfan S**, Ahmad A, Guhar D, Khan E, Malik F, Mahmood S, Zafar A. Eastern Mediterranean Health Journal. 2012 Dec 4;16(12):1226-30. DOI: [10.26719/2010.16.12.1226](https://doi.org/10.26719/2010.16.12.1226).

YEAR 2011

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44. Phylogenetic diversity of *Escherichia coli* strains producing NDM-1 carbapenemase. Mushtaq S, **Irfan S**, Sarma JB, Doumith M, Pike R, Pitout J, Livermore DM, Woodford N. J Antimicrob Chemother. 2011 Sep; 66(9):2002-5. DOI: [10.1093/jac/dkr226](https://doi.org/10.1093/jac/dkr226).
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61. Rapid Detection of Mycobacterium Tuberculosis in Sputum Samples by Microscopic Observation Methods. **Irfan S**, Hasan R, Kanji A, Hassan Q, Azam I. Infectious Diseases Journal of Pakistan. 2008;17(01): 10-13.

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63. Evaluation of a microcolony detection method and phage assay for rapid detection of Mycobacterium tuberculosis in sputum samples. **Irfan S**, Hasan R, Kanji A, Hassan Q and Azam I. Southeast Asian J Trop Med Public Health. 2006 Nov; 37(6):1187-95.
64. Assessment of primary and secondary resistance in MDR TB Isolates. **Irfan S**, Hassan Q, Hasan R. J Pak Med Assoc. 2006 Sep; 56(9):397-400. <https://jpma.org.pk/PdfDownload/833>.

BOOK CHAPTERS:

1. Nosocomial and Healthcare-Associated NTM Infections and Their Control, Nontuberculo Mycobacteria (NTM), Microbiological, Clinical and Geographical Distribution. Sadia Shakoor, Maria Owais, Rumina Hasan, **Seema Irfan**. 2019, Chapter 9, Pages 177-19.
2. Fungal media and cultures (2017). In Practical guide and atlas for the diagnosis of fungal infections. Mohammad Zeeshan and **Seema Irfan**. Chapter; The Aga Khan University.

3. Imran Ahmed and **Seema Irfan**. Chapter; Quality assurance (2017). In Practical guide and atlas for the diagnosis of fungal infections. The Aga Khan University.

CONTRIBUTIONS TO REPORTS, GUIDELINES AND POLICY DOCUMENTS:

1. Contributing author of “National Guidelines Infection Prevention & Control” National Institute of Health (NIH) 2020.
2. Contributing author of “Guidelines for prevention of COVID-19 spread in healthcare settings of Pakistan” by MMIDSP, 2020.
3. Reviewer of national “Sepsis “guideline 2015 and Urdu version of guideline for “Infection Prevention & Control”.