

Supplementary file 2 - Included study details

Theme	Citation	First author gender	Last author gender
Career lifecycle			
1	Rouse LP, Nagy-Agren S, Gebhard RE, Bernstein WK. Women Physicians: Gender and the Medical Workplace. J Womens Health (Larchmt). 2020 Mar;29(3):297-309. doi: 10.1089/jwh.2018.7290. Epub 2020 Jan 20. PMID: 31967945.	Female	Female
2	Lyons NB, Bernardi K, Olavarria OA, Shah P, Dhanani N, Loor M, Holihan JL, Liang MK. Gender Disparity Among American Medicine and Surgery Physicians: A Systematic Review. Am J Med Sci. 2021 Feb;361(2):151-168. doi: 10.1016/j.amjms.2020.10.017. Epub 2020 Oct 24. PMID: 33526213.	Female	Male
3	Burgos CM, Josephson A. Gender differences in the learning and teaching of surgery: a literature review. Int J Med Educ. 2014 Jun 15;5:110-24. doi: 10.5116/ijme.5380.ca6b. PMID: 25341220; PMCID: PMC4207172.	Female	Female
4	Fichera G, Busch IM, Rimondini M, Motta R, Giraudo C. Is Empowerment of Female Radiologists Still Needed? Findings of a Systematic Review. Int J Environ Res Public Health. 2021 Feb 5;18(4):1542. doi: 10.3390/ijerph18041542. PMID: 33562881; PMCID: PMC7915271.	Female	Female
5	Bucknor A, Kamali P, Phillips N, Mathijssen I, Rakhorst H, Lin SJ, Furnas H. Gender Inequality for Women in Plastic Surgery: A Systematic Scoping Review. Plast Reconstr Surg. 2018 Jun;141(6):1561-1577. doi: 10.1097/PRS.0000000000004375. PMID: 29794715.	Female	Female
6	Xepoleas MD, Munabi NCO, Auslander A, Magee WP, Yao CA. The experiences of female surgeons around the world: a scoping review. Hum Resour Health. 2020 Oct 28;18(1):80. doi: 10.1186/s12960-020-00526-3.	Female	Female

	PMID: 33115509; PMCID: PMC7594298.		
7	Rizvi R, Raymer L, Kunik M, Fisher J. Facets of career satisfaction for women physicians in the United States: a systematic review. <i>Women Health</i> . 2012;52(4):403-21. doi: 10.1080/03630242.2012.674092. PMID: 22591235.	Female	Female
8	Hoff T, Scott S. The gendered realities and talent management imperatives of women physicians. <i>Health Care Manage Rev</i> . 2016 Jul-Sep;41(3):189-99. doi: 10.1097/HMR.0000000000000069. PMID: 25978004.	Male	Female
9	Degen C, Li J, Angerer P. Physicians' intention to leave direct patient care: an integrative review. <i>Hum Resour Health</i> . 2015 Sep 8;13:74. doi: 10.1186/s12960-015-0068-5. PMID: 26350545; PMCID: PMC4563836.	Female	Male
10	Shi HH, Westrup AM, O'Neal CM, Hendrix MC, Dunn IF, Gernsback JE. Women in Neurosurgery Around the World: A Systematic Review and Discussion of Barriers, Training, Professional Development, and Solutions. <i>World Neurosurg</i> . 2021 Oct;154:206-213.e18. doi: 10.1016/j.wneu.2021.07.037. Epub 2021 Jul 16. PMID: 34280544.	Female	Female
11	Winkel AF, Telzak B, Shaw J, Hollond C, Magro J, Nicholson J, Quinn G. The Role of Gender in Careers in Medicine: a Systematic Review and Thematic Synthesis of Qualitative Literature. <i>J Gen Intern Med</i> . 2021 Aug;36(8):2392-2399. doi: 10.1007/s11606-021-06836-z. Epub 2021 May 4. PMID: 33948802; PMCID: PMC8342686.	Female	Female
12	Rudman JS, Farcas A, Salazar GA, Hoff JJ, Crowe RP, Whitten-Chung K, Torres G, Pereira C, Hill E, Jafri S, Page DI, von Isenburg M, Haamid A, Joiner AP. Diversity, Equity, and Inclusion in the United States Emergency Medical Services Workforce: A Scoping Review. <i>Prehosp Emerg Care</i> . 2023;27(4):385-397. doi: 10.1080/10903127.2022.2130485. Epub 2022 Oct 24. PMID: 36190493.	Male	Female
13	Raine G, Evans C, Uphoff EP, Brown JVE, Crampton PES, Kehoe A,	Male	Female

	Stewart LA, Finn GM, Morgan JE. Strengthening the clinical academic pathway: a systematic review of interventions to support clinical academic careers for doctors and dentists. <i>BMJ Open</i> . 2022 Sep 8;12(9):e060281. doi: 10.1136/bmjopen-2021-060281. PMID: 36691216; PMCID: PMC9462120.		
14	Ferrari L, Mari V, De Santi G, Parini S, Capelli G, Tacconi G, Chessa A, Verdi D, Frigerio I, Spolverato G, Gumbs A. Early Barriers to Career Progression of Women in Surgery and Solutions to Improve Them: A Systematic Scoping Review. <i>Ann Surg</i> . 2022 Aug 1;276(2):246-255. doi: 10.1097/SLA.0000000000005510. Epub 2022 Jul 4. PMID: 35797642.	Female	Male
15	Wang A, Shlobin NA, DiCesare JAT, Holly LT, Liau LM. Diversity in Neurosurgical Recruitment and Training in the United States: A Systematic Review. <i>World Neurosurg</i> . 2022 Jun;162:111-117.e1. doi: 10.1016/j.wneu.2022.03.086. Epub 2022 Mar 24. PMID: 35339710.	Male	Female
Burnout			
16	Rotenstein LS, Torre M, Ramos MA, Rosales RC, Guille C, Sen S, Mata DA. Prevalence of Burnout Among Physicians: A Systematic Review. <i>JAMA</i> . 2018 Sep 18;320(11):1131-1150. doi: 10.1001/jama.2018.12777. PMID: 30326495; PMCID: PMC6233645.	Female	Male
17	Galaiya R, Kinross J, Arulampalam T. Factors associated with burnout syndrome in surgeons: a systematic review. <i>Ann R Coll Surg Engl</i> . 2020 Jul;102(6):401-407. doi: 10.1308/rcsann.2020.0040. Epub 2020 Apr 24. PMID: 32326734; PMCID: PMC7388944.	Male	Male
18	Pulcrano M, Evans SR, Sosin M. Quality of Life and Burnout Rates Across Surgical Specialties: A Systematic Review. <i>JAMA Surg</i> . 2016 Oct 1;151(10):970-978. doi: 10.1001/jamasurg.2016.1647. PMID: 27410167.	Female	Male
19	Hoff T, Lee DR. Burnout and Physician Gender: What Do We Know? <i>Med Care</i> . 2021 Aug 1;59(8):711-720. doi: 10.1097/MLR.0000000000001584. PMID: 34081678.	Male	Male

20	Sanfilippo F, Noto A, Foresta G, Santonocito C, Palumbo GJ, Arcadipane A, Maybauer DM, Maybauer MO. Incidence and Factors Associated with Burnout in Anesthesiology: A Systematic Review. Biomed Res Int. 2017;2017:8648925. doi: 10.1155/2017/8648925. Epub 2017 Nov 28. PMID: 29318155; PMCID: PMC5727625.	Male	Male
21	Azam K, Khan A, Alam MT. Causes and Adverse Impact of Physician Burnout: A Systematic Review. J Coll Physicians Surg Pak. 2017 Aug;27(8):495-501. PMID: 28903843.	Male	Male
22	Mackel CE, Nelton EB, Reynolds RM, Fox WC, Spiotta AM, Stippler M. A Scoping Review of Burnout in Neurosurgery. Neurosurgery. 2021 Apr 15;88(5):942-954. doi: 10.1093/neuros/nyaa564. PMID: 33471896.	Male	Female
23	Doraiswamy S, Chaabna K, Jithesh A, Mamtani R, Cheema S. Physician burnout in the Eastern Mediterranean region: influence of gender and related factors - Systematic review and meta-analysis. J Glob Health. 2021 Jul 17;11:04043. doi: 10.7189/jogh.11.04043. PMID: 34326993; PMCID: PMC8285757.	Male	Female
24	Low ZX, Yeo KA, Sharma VK, Leung GK, McIntyre RS, Guerrero A, Lu B, Sin Fai Lam CC, Tran BX, Nguyen LH, Ho CS, Tam WW, Ho RC. Prevalence of Burnout in Medical and Surgical Residents: A Meta-Analysis. Int J Environ Res Public Health. 2019 Apr 26;16(9):1479. doi: 10.3390/ijerph16091479. PMID: 31027333; PMCID: PMC6539366.	Female	Male
25	Sauder M, Zagales I, Zagales R, Das S, Sen-Crowe B, Bilski T, Kornblith L, Elkbuli A. Comprehensive Assessment of Burnout Among Surgical Trainees and Practicing Surgeons: A Systematic Review. J Surg Educ. 2022 Sep-Oct;79(5):1188-1205. doi: 10.1016/j.jsurg.2022.04.009. Epub 2022 May 25. PMID: 35624025.	Male	Male
Discrimination			
26	St-Pierre F, Warsame R. Nuances of the Female Nurse-Physician Relationship: An Evolution Across Time. Mayo Clin Proc. 2020	Female	Female

	May;95(5):1040-1049. doi: 10.1016/j.mayocp.2019.10.016. Epub 2020 Apr 13. PMID: 32299671.		
27	Filut A, Alvarez M, Carnes M. Discrimination Toward Physicians of Color: A Systematic Review. J Natl Med Assoc. 2020 Apr;112(2):117-140. doi: 10.1016/j.jnma.2020.02.008. Epub 2020 Mar 18. PMID: 32197899; PMCID: PMC7253328.	Female	Female
28	O'Connor MI. Medical School Experiences Shape Women Students' Interest in Orthopaedic Surgery. Clin Orthop Relat Res. 2016 Sep;474(9):1967-72. doi: 10.1007/s11999-016-4830-3. PMID: 27084717; PMCID: PMC4965370.	Female	n/a
29	Lim WH, Wong C, Jain SR, Ng CH, Tai CH, Devi MK, Samarasekera DD, Iyer SG, Chong CS. The unspoken reality of gender bias in surgery: A qualitative systematic review. PLoS One. 2021 Feb 2;16(2):e0246420. doi: 10.1371/journal.pone.0246420. PMID: 33529257; PMCID: PMC7853521.	Female	Male
30	Keir M, McFadden C, Ruzycski S, Weeks S, Slawnych M, Scott McClure R, Kuriachan V, Fedak P, Morillo C. Lack of Equity in the Cardiology Physician Workforce: A Narrative Review and Analysis of the Literature. CJC Open. 2021 Sep 28;3(12 Suppl):S180-S186. doi: 10.1016/j.cjco.2021.09.019. PMID: 34993447; PMCID: PMC8712672.	Female	Male
31	Pearson C, Piper M, Bhanja D, Zhou S, Burns AS. Career satisfaction in women surgeons: A systematic review and meta-analysis. Am J Surg. 2023 Nov;226(5):616-622. doi: 10.1016/j.amjsurg.2023.07.015. Epub 2023 Aug 11. PMID: 37586896.	Female	Female
32	Pechlivanidou E, Antonopoulos I, Margariti RE. Gender equality challenges in orthopaedic surgery: a systematic review. Int Orthop. 2023 Sep;47(9):2143-2171. doi: 10.1007/s00264-023-05876-w. Epub 2023 Jul 12. PMID: 37433883.	Female	Female
33	Ferrari L, Mari V, Parini S, Capelli G, Tacconi G, Chessa A, De Santi G, Verdi D, Frigerio I, Scarpa M, Gumbs A, Spolverato G. Discrimination	Female	Female

	Toward Women in Surgery: A Systematic Scoping Review. Ann Surg. 2022 Jul 1;276(1):1-8. doi: 10.1097/SLA.0000000000005435. Epub 2022 Mar 10. PMID: 35275886.		
34	Bellini MI, Amabile MI, Saullo P, Zorzetti N, Testini M, Caronna R, D'Andrea V. A Woman's Place Is in Theatre, but Are Theatres Designed with Women in Mind? A Systematic Review of Ergonomics for Women in Surgery. J Clin Med. 2022 Jun 18;11(12):3496. doi: 10.3390/jcm11123496. PMID: 35743578; PMCID: PMC9225169.	Female	Male
Academic roles			
35	Bosco L, Lorello GR, Flexman AM, Hastie MJ. Women in anaesthesia: a scoping review. Br J Anaesth. 2020 Mar;124(3):e134-e147. doi: 10.1016/j.bja.2019.12.021. Epub 2020 Jan 23. PMID: 31983412.	Female	Female
36	Li B, Jacob-Brassard J, Dossa F, Salata K, Kishibe T, Greco E, Baxter NN, Al-Omran M. Gender differences in faculty rank among academic physicians: a systematic review and meta-analysis. BMJ Open. 2021 Nov 2;11(11):e050322. doi: 10.1136/bmjopen-2021-050322. PMID: 34728447; PMCID: PMC8565568.	Male	Male
37	Myers SP, Reitz KM, Wessel CB, Neal MD, Corbelli JA, Hausmann LRM, Rosengart MR. A Systematic Review of Gender-Based Differences in Hirsch Index Among Academic Surgeons. J Surg Res. 2019 Apr;236:22-29. doi: 10.1016/j.jss.2018.10.015. Epub 2018 Dec 3. PMID: 30694759; PMCID: PMC6534118.	Female	Male
38	Ha GL, Lehrer EJ, Wang M, Holliday E, Jagsi R, Zaorsky NG. Sex Differences in Academic Productivity Across Academic Ranks and Specialties in Academic Medicine: A Systematic Review and Meta-analysis. JAMA Netw Open. 2021 Jun 1;4(6):e2112404. doi: 10.1001/jamanetworkopen.2021.12404. PMID: 34185071; PMCID: PMC8243235.	Female	Male
39	Soklaridis S, Black G, LeBlanc C, MacKinnon KR, Holroyd-Leduc J,	Female	Female

	Clement F, Schrewe B, Ross HJ, Calleja S, Stergiopoulos V, Taylor VH, Kuper A. Academic Productivity of Equity-Deserving Physician Scholars During COVID-19: A Scoping Review. Acad Med. 2023 Jan 1;98(1):123-135. doi: 10.1097/ACM.0000000000004971. Epub 2022 Sep 20. PMID: 36576772; PMCID: PMC9779983.		
Motherhood			
40	Chesak SS, Yngve KC, Taylor JM, Voth ER, Bhagra A. Challenges and Solutions for Physician Mothers: A Critical Review of the Literature. Mayo Clin Proc. 2021 Jun;96(6):1578-1591. doi: 10.1016/j.mayocp.2020.10.008. Epub 2021 Apr 9. PMID: 33840524.	Female	Female
41	Hoffman R, Mullan J, Nguyen M, Bonney AD. Motherhood and medicine: systematic review of the experiences of mothers who are doctors. Med J Aust. 2020 Oct;213(7):329-334. doi: 10.5694/mja2.50747. Epub 2020 Aug 31. PMID: 32865236.	Female	Male
42	Todd AR, Cawthorn TR, Temple-Oberle C. Pregnancy and Parenthood Remain Challenging During Surgical Residency: A Systematic Review. Acad Med. 2020 Oct;95(10):1607-1615. doi: 10.1097/ACM.0000000000003351. PMID: 32271231.	Female	Female
43	Mavedatnia D, Ardestani S, Zahabi S, Neocleous P, Madou E, Dzioba A, Strychowsky JE, Graham ME. The Experiences of Motherhood in Female Surgeons: A Scoping Review. Ann Surg. 2023 Feb 1;277(2):214-222. doi: 10.1097/SLA.0000000000005730. Epub 2022 Oct 17. PMID: 36250326.	Female	Female
44	Hanchuk S, Casilla-Lennon M, Zheng S, Kim DD, Press B, Nguyen JV, Grimshaw A, Leapman MS, Rickey LM, Cavallo JA. The Medical Community's Evolving Focus on Physician and Surgeon Pregnancy: Thematic Trends From a Scoping Review. Acad Med. 2022 Jul 1;97(7):1071-1078. doi: 10.1097/ACM.0000000000004629. Epub 2022 Jun 23. PMID: 35171119; PMCID: PMC9247020.	Female	Male
Competencies			

45	Ali A, Subhi Y, Ringsted C, Konge L. Gender differences in the acquisition of surgical skills: a systematic review. Surg Endosc. 2015 Nov;29(11):3065-73. doi: 10.1007/s00464-015-4092-2. Epub 2015 Jan 29. PMID: 25631116.	Male	Male
46	Freeman J, Peisah C. Imposter syndrome in doctors beyond training: a narrative review. Australas Psychiatry. 2022 Feb;30(1):49-54. doi: 10.1177/10398562211036121. Epub 2021 Aug 31. PMID: 34464225.	Male	Female
47	Vajapey, Sravya & Weber, Kristy & Samora, Julie. (2020). Confidence gap between men and women in medicine: a systematic review. Current Orthopaedic Practice 31(5): p494-502, September/October 2020. doi: 10.1097.BCO.0000000000000906	Female	Female
Mental health			
48	Dutheil F, Aubert C, Pereira B, Dambrun M, Moustafa F, Mermillod M, Baker JS, Trousselard M, Lesage FX, Navel V. Suicide among physicians and health-care workers: A systematic review and meta-analysis. PLoS One. 2019 Dec 12;14(12):e0226361. doi: 10.1371/journal.pone.0226361. PMID: 31830138; PMCID: PMC6907772.	Male	Male
49	Egbe A, El Boghdady M. Anxiety and depression in surgeons: A systematic review. Surgeon. 2024 Feb;22(1):6-17. doi: 10.1016/j.surge.2023.09.009. Epub 2023 Oct 16. PMID: 37852902.	Female	Male
Organisational factors			
50	El Arnaout N, Chehab RF, Rafii B, Alameddine M. Gender equity in planning, development and management of human resources for health: a scoping review. Hum Resour Health. 2019 Jul 11;17(1):52. doi: 10.1186/s12960-019-0391-3. PMID: 31296235; PMCID: PMC6625080.	Female	Male
51	Hirayama M, Fernando S. Organisational barriers to and facilitators for female surgeons' career progression: a systematic review. J R Soc Med. 2018 Sep;111(9):324-334. doi: 10.1177/0141076818790661. Epub 2018	Female	Male

	Sep 3. PMID: 30175935; PMCID: PMC6146338.		
Violence			
52	Giménez Lozano JM, Martínez Ramón JP, Morales Rodríguez FM. Doctors and Nurses: A Systematic Review of the Risk and Protective Factors in Workplace Violence and Burnout. <i>Int J Environ Res Public Health</i> . 2021 Mar 22;18(6):3280. doi: 10.3390/ijerph18063280. PMID: 33810020; PMCID: PMC8004742.	Male	Male
53	Keller S, Yule S, Zagarese V, Henrickson Parker S. Predictors and triggers of incivility within healthcare teams: a systematic review of the literature. <i>BMJ Open</i> . 2020 Jun 7;10(6):e035471. doi: 10.1136/bmjopen-2019-035471. PMID: 32513884; PMCID: PMC7282335.	Female	Female
Earnings			
54	Hoff T, Lee DR. The gender pay gap in medicine: A systematic review. <i>Health Care Manage Rev</i> . 2021 Jul-Sep 01;46(3):E37-E49. doi: 10.1097/HMR.0000000000000290. Epub 2021 Jan 29. PMID: 33534271.	Male	Male
Mentorship			
55	Bonifacino E, Ufomata EO, Farkas AH, Turner R, Corbelli JA. Mentorship of Underrepresented Physicians and Trainees in Academic Medicine: a Systematic Review. <i>J Gen Intern Med</i> . 2021 Apr;36(4):1023-1034. doi: 10.1007/s11606-020-06478-7. Epub 2021 Feb 2. PMID: 33532959; PMCID: PMC7852467.	Female	Female
Patient outcomes			
56	Champagne-Langabeer, T., Hedges, A.L. Physician gender as a source of implicit bias affecting clinical decision-making processes: a scoping review. <i>BMC Med Educ</i> 21, 171 (2021). https://doi.org/10.1186/s12909-021-02601-2	Female	Male