

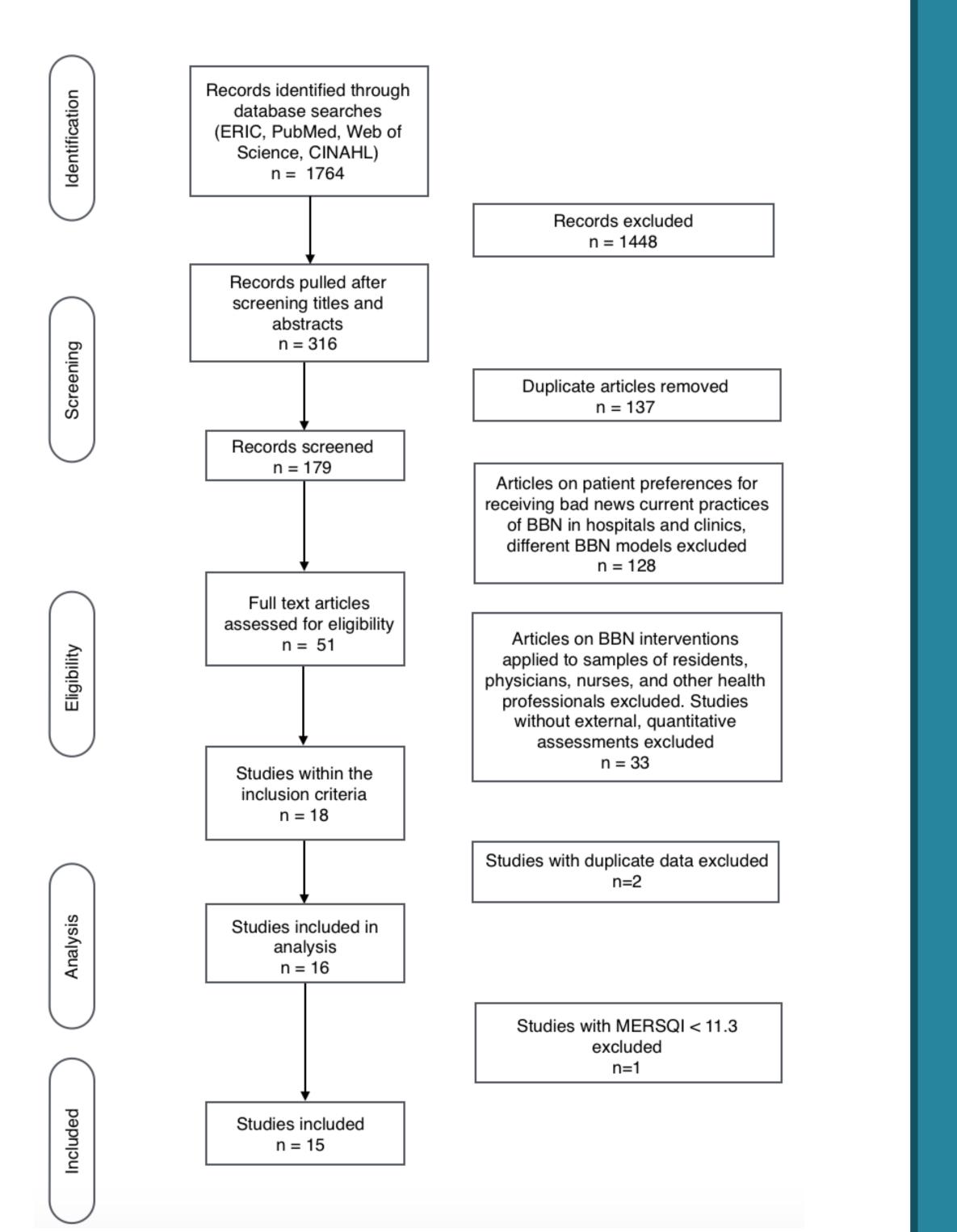
Introduction

Patient Perception

- Seifert, 2014 only 46.2% of cancer patients in Germany are satisfied by how their physician broke the news of cancer to them.¹
- Brown, 2011 only 21.6% of patients remembered their doctors being sympathetic, kind, and sensitive.² Physician Perception
- Cheon 2017 post-intervention in communications skills training, there were significant decreases in "emotional exhaustion," "depersonalization," and "personal accomplishment" – Maslach Burnout Inventory.³
- Orgel 2010 73% of trainees and 66% of attendings agreed the quantity and quality of formal teaching for delivering bad news was not adequate and a majority of residents and fellows rated their knowledge necessary to break bad news as insufficient.⁴

Methods

Search Terms: Breaking bad news, communication of bad news, delivery of bad news, life-altering information, medical student, medical education, medical training, curriculum, SPIKES



Narrative Review of Interventions to Teach Medical Students How to Break Bad News

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Specific Aims

1.Identify quality research studies that discuss undergraduate medical education models being used to teach students how to break bad news

2.Use these findings to present recommendations to medical educators on best practices for teaching medical students how to deliver bad news

Results

Author, Year	Title & MERSQI ¹⁹ Score		Intervention Type
Kron, 2017	Using a computer simulation for teaching communication skills: A blinded multisite mixed methods randomized controlled trial	16.5	Didactic lecture on general communication principles, MPathic-VR - SPIKES
Gorniewicz, 2017	Breaking Bad News to Patients with Cancer: A Randomized Control Trial of a Brief Communication Skills Training Module Incorporating the Stories and Preferences of Actual Patients	15.5	Videos from 27 cancer patients describing challenging BBN experiences and SP interviews
Berney, 2016	Individual training at the undergraduate level to promote competence in breaking bad news in oncology	15.5	Video-taped SP interview and feedback
Schmitz <i>,</i> 2016	The Learning Effects of Different Presentations of Worked Examples on Medical Students' Breaking-Bad-News skills: A Randomized and Blinded Field Trial	15.5	Learning modules with video- based examples and hints - SPIKES
Burg, 2019	What Skills Really Improve After a Flipped Educational Intervention to Train Medical Students and Residents to Break Bad News?	15.5	DocCom Module 33 and small group workshop & discussion
Marko, 2015	Structured Teaching of Early Pregnancy Loss Counseling	15	2hr lecture & role-play - SPIKES
Wijnen-Meijer, 2015	Vertically Integrated Medical Education and the Readiness for Practice of Graduates	15	Vertical Integration of Medical Education
Bowyer, 2010	Teaching Breaking Bad News Using Mixed Reality Simulation	14.5	45min lecture, demonstration by faculty, 15min video - SPIKES
Westmoreland, 2018	A standardized low-cost peer role-playing training intervention improves medical student competency in communicating bad news to patients in Botswana	14.5	3hr workshop with lecture, role play, discussion, and reference cards - SPIKES
Vermylen, 2019	Development of a Simulation-Based Learning Curriculum for Breaking Bad News	14	4hr lecture, faculty demonstration, 3hr simulator based master learning - SPIKES
Schildmann, 2010	Teaching and evaluating breaking bad news: A pre-post evaluation study of a teaching intervention for medical students and a comparative analysis of different measurement instruments and raters	14	Teaching module (Cushing &Jones) & role-play - SPIKES
Wouda, 2010	The communication of medical students, residents, and consultants	14	Lectures, small group teaching, and role play
Baer, 2008	Breaking Bad News: Use of Cancer Survivors in Role-Playing Exercises	13	Lecture, large group activity, video, role play - SPIKES
Bounnad – Antignac, 2010	Videotaped simulated interviews to improve medical students' skills in disclosing a diagnosis of cancer	12	Lecture & discussion - SPIKES
Dikici, 2009	Teaching Medical Students How to Break Bad News: A Turkish Experience	12	Lecture, discussion, small group teaching with SPs

We conducted a literature review of the interventions between 2004 -2019 that were focused on teaching medical students how to break bad news with the following goals in mind:



Conclusions/Practical Implications

- 3 pronged approach: didactics, role-play, and SP interview
- Longitudinal training interspersed in medical school curriculum
- Annotation of teaching videos with good and bad practices
- Role plays with feedback, placing emphasis on nonverbal behavior, perceived empathetic responses, and the use of explicit and implicit language
- Rigid training of SPs using videos of role play sessions or sample encounters to ensure high fidelity interview simulation
- Patient feedback of student performance during SP encounter
- Assessments evaluating global communication skills, delivery of bad news, and empathy separately

Literature cited

- 1. Seifart C, Hofmann M, Bär T, Riera Knorrenschild J, Seifart U, Rief W. Breaking bad news-what patients want and what they get: evaluating the SPIKES protocol in Germany. Ann Oncol. 2014 Mar;25(3):707–11.
- 2. Brown VA, Parker PA, Furber L, Thomas AL. Patient preferences for the delivery of bad news the experience of a UK Cancer Centre. Eur J Cancer Care . 2011 Jan;20(1):56–61. 3. Cheon S, Fu W, Agarwal A, Wan BA, Chow E, Henry B. The impact of breaking bad news on oncologist burnout and
- how communication skills can help: A scoping review. Journal of Pain Management. 2017;10(1):89–97. 4. Orgel E, McCarter R, Jacobs S. A failing medical educational model: a self-assessment by physicians at all levels of
- training of ability and comfort to deliver bad news. J Palliat Med. 2010 Jun;13(6):677–83. 5. Kron FW, Fetters MD, Scerbo MW, White CB, Lypson ML, Padilla MA, et al. Using a computer simulation for teaching communication skills: A blinded multisite mixed methods randomized controlled trial. Patient Educ Couns. 2017 Apr:100(4):748-59.
- 6. Gorniewicz J, Floyd M, Krishnan K, Bishop TW, Tudiver F, Lang F. Breaking bad news to patients with cancer: A randomized control trial of a brief communication skills training module incorporating the stories and preferences of actual patients [Internet]. Vol. 100, Patient Education and Counseling. 2017. p. 655–66. Available from: http://dx.doi.org/10.1016/j.pec.2016.11.008
- 7. Schmitz FM, Schnabel KP, Bauer D, Bachmann C, Woermann U, Guttormsen S. The learning effects of different presentations of worked examples on medical students' breaking-bad-news skills: A randomized and blinded field trial [Internet]. Vol. 101, Patient Education and Counseling. 2018. p. 1439–51. Available from: http://dx.doi.org/10.1016/j.pec.2018.02.013
- 8. Burg LB, Daetwyler CJ, de Oliveira Filho GR, Del Castanhel F, Grosseman S. What Skills Really Improve After a Flipped Educational Intervention to Train Medical Students and Residents to Break Bad News? [Internet]. Vol. 8, Journal of Education and Learning. 2019. p. 35. Available from: http://dx.doi.org/10.5539/jel.v8n3p35
- 9. Marko EK, Buery-Joyner SD, Sheridan MJ, Nieves K, Khoury AN, Dalrymple JL. Structured Teaching of Early Pregnancy Loss Counseling. Obstet Gynecol. 2015 Oct;126 Suppl 4:1S – 6S.
- 10. Wijnen-Meijer M, Ten Cate O, van der Schaaf M, Burgers C, Borleffs J, Harendza S. Vertically integrated medical education and the readiness for practice of graduates. BMC Med Educ. 2015 Dec 21;15:229. 11. Bowyer MW, Hanson JL, Pimentel EA, Flanagan AK, Rawn LM, Rizzo AG, et al. Teaching breaking bad news using
- mixed reality simulation. J Surg Res. 2010 Mar;159(1):462–7. 12. Westmoreland KD, Banda FM, Steenhoff AP, Lowenthal ED, Isaksson E, Fassl BA. A standardized low-cost peer roleplaying training intervention improves medical student competency in communicating bad news to patients in Botswana. Palliat Support Care. 2019 Feb;17(1):60–5.
- 13. Vermylen JH, Wood GJ, Cohen ER, Barsuk JH, McGaghie WC, Wayne DB. Development of a Simulation-Based Mastery Learning Curriculum for Breaking Bad News. J Pain Symptom Manage. 2019 Mar;57(3):682–7.
- 14. Schildmann J, Kupfer S, Burchardi N, Vollmann J. Teaching and evaluating breaking bad news: A pre–post evaluation study of a teaching intervention for medical students and a comparative analysis of different measurement instruments and raters [Internet]. Vol. 86, Patient Education and Counseling. 2012. p. 210–9. Available from: http://dx.doi.org/10.1016/j.pec.2011.04.022
- 15. Wouda JC, van de Wiel HBM. The communication competency of medical students, residents and consultants. Patient Educ Couns. 2012 Jan;86(1):57–62.
- 16. Baer AN, Freer JP, Milling DA, Potter WR, Ruchlin H, Zinnerstrom KH. Breaking bad news: use of cancer survivors in role-playing exercises. J Palliat Med. 2008 Jul;11(6):885–92.
- 17. Bonnaud-Antignac A, Campion L, Pottier P, Supiot S. Videotaped simulated interviews to improve medical students' skills in disclosing a diagnosis of cancer. Psychooncology. 2010 Sep;19(9):975–81. 18. Dikici MF, Yaris F, Cubukcu M. Teaching medical students how to break bad news: a Turkish experience. J Cancer
- Educ. 2009;24(4):246-8.
- 19. Cook DA, Reed DA. Appraising the quality of medical education research methods: the Medical Education Research Study Quality Instrument and the Newcastle-Ottawa Scale-Education. Acad Med. 2015 Aug;90(8):1067–76.

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