

Paramedic Critically Appraised Topic: LGBTQ+ Education for Paramedics

Reported by: Jenna DeSilva 2nd Party Appraiser: Alan Batt

Clinical Scenario: Paramedics are dispatched to a 25-year-old male complaining of shortness of breath and chest pain. He is tachypneic and the pain came on suddenly, but leaning forward and not taking deep breaths seems to lessen it slightly. During your survey, you wish to examine his chest; however, he is guarding it and does not seem willing to let you examine it. He later reveals that he is self-conscious of his top surgery scars and is distrustful of healthcare providers due to the experiences he has had in the past. In addition, he is reluctant to share that he has previously struggled with substance abuse and depression.

Paramedics, along with other healthcare providers, aim to provide high-quality, safe, and consistent care that complies with best practice (Carter *et al.*, 2018). Part of this practice involves sensitivity to a patient's circumstances and the facilitation of their comfort during care. This CAT hopes to analyze the necessity of LGBTQ+-specific sensitivity training for paramedics.

PICO (Population- Intervention- Comparison- Outcome) question: Does the training of paramedics about LGBTQ+ and gender diverse individuals result in higher quality and more inclusive prehospital care?

Search strategy:

((paramedic OR ems OR emergency medical service OR prehospital OR ambulance OR emergency medical technician OR emt) AND (lgbtq OR lesbian OR gay OR homosexual OR bisexual OR transgender OR queer OR sexual minority))

Limits: last 5 years, peer-reviewed, English, Humans

Search outcome: MEDLINE: 14 results, CINAHL: 7 results

Inclusion criteria: Studies must include information about LGBTQ+ or gender diverse individuals; be composed of adult data (19+ years); be in relation to education and training of paramedics OR the experience of, and barriers faced by, LGBTQ+ individuals; and be conducted in, or relevant to, an emergency prehospital setting.

Relevant papers: 3 were chosen as relevant for this CAT

The evidence is graded according to the 3-point Level of Evidence Scale (LOE), as used by the Canadian Prehospital Evidence-Based Practice Project (PEP).

Author, Date	Population: Sample Characteristics	Design (LOE)	Study Aims	Results	Strengths/Weaknesses
Vermeir, Jackson, & Marshall (2018)	<p>8 trans adults</p> <p>English speaking</p> <p>Currently living in Nova Scotia</p> <p>Wanted or tried to access primary emergency care within the last two years</p>	<p>One-on-one semi-structured interviews (45-120 minutes in length) analyzed via the constant comparative method and framework analysis (LOE 3)</p>	<p>Investigating the avoidance and underutilization of primary and emergency healthcare by trans individuals on the basis of physical environment, social environment, and interpersonal barriers</p>	<p>Main barriers identified:</p> <p>Healthcare providers perceived knowledge is lacking. Some did not know what transgender meant and many had to be educated by their patient, distracting from the provision of services.</p> <p>Negative or uncomfortable attitudes (i.e. misgendering or microaggressions)</p> <p>Fear for safety when ‘outed’, especially in rural locations</p> <p>Unnecessary/unprofessional physical examinations</p> <p>Physical environment not conducive to privacy</p> <p>Gender binary paperwork</p> <p>Exclusion of trans identity from the healthcare social setting and curriculum</p>	<p>(+) Addresses the need to recognize subtle discriminatory acts which bar access to healthcare and are additively detrimental</p> <p>(+) Includes rigorous coding, allowing a transparent audit trail, ensuring fidelity with original meanings of participants’ words</p> <p>(-) Small sample size and relatively privileged sample (Caucasian, post-secondary education, employed, and internet access), which is not able to be generalized to all trans individuals in all settings</p> <p>(-) Regional bias in Nova Scotia</p> <p>(-) Barriers to access for other sexual minorities may differ</p>

<p>Jalili, Levy, & Tang (2015)</p>	<p>16 EMS educational program directors in Maryland (USA)</p>	<p>Anonymous survey distributed electronically (excluded from PEP)</p>	<p>To assess the educational practices of EMS educators in the State of Maryland in relation to LGBT patient care</p>	<p>20 programs met inclusion criteria, and 16 completed the survey 14 (88%) >10-year tenure 15 (94%) included general cultural sensitivity training - 14 (88%) via lecture - 8 (50%) supplemented with simulations - 5 (31%) online methods 6 (38%) already teaching LGBT related issues - 4 (25%) via lecture - 3 (19%) simulation - 1 (6%) online Duration of training ranged from 15 minutes to 8 hours - 4 (25%) dedicating 1-2 hours 12 (75%) willing to include LGBT-specific content 16 (100%) specified aspects of LGBT-related emergency health issues they would wish to see included in a formulated education module</p>	<p>(+) Highly relevant: Guide development of open-access module for inclusion in EMS educational programs (+) Strong response rate representing the population being surveyed, providing a feasible first approach at questioning this cohort (-) Small sample size (-) Survey is possibly too concise given the complexity of the matter discussed (-) Regional bias in the State of Maryland USA, resulting in limited generalizability to other states or regions (-) Questions should also be posed to EMS Chiefs to query continuing medical education while on the job</p>
--	---	--	---	---	--

<p>Bristol, Kostelec, & MacDonald (2018)</p>	<p>95 emergency department (ED) staff pre-intervention</p> <p>40 ED staff post-intervention</p> <p>Comprised of nurses, nurse practitioners, physicians, and unit secretaries</p>	<p>Pre-/post-intervention design measured by AIM*, with no comparison group (LOE 3)</p>	<p>Whether LGBT-specific cultural competency training affects the knowledge and attitudes of ED healthcare team members</p>	<p>85.3% of ED staff had no prior LGBT-specific education</p> <p>Overall AIM index scores significantly increased in the post-intervention group from 64.1% to 72.5% (P< 0.001)</p> <p>Knowledge and Skills subscale experienced a significant increase of 14.9% (P< 0.001)</p> <p>Openness and Support subscale increased, but not significantly</p> <p>Oppression and Awareness subscale experienced a significant increase of 6.5%(P=0.005)</p> <p>Data has Cronbach's alphas of 0.76 to 0.88, indicating reliability of results</p>	<p>(+) Educational intervention is able to increase knowledge, support, and awareness surrounding LGBT needs in healthcare sphere</p> <p>(+) Qualitative methodology appropriate</p> <p>(+) Data analysis rigorous</p> <p>(-) Sampling population was from an urban, level II trauma center in Maryland, but a larger and more varied sample (across geography and disciplines) is needed for generalizability</p> <p>(-) ED staff queried, but limited transferability to paramedic profession</p> <p>(-) Low return rate of post-intervention AIM surveys</p> <p>(-) LGBT patient data can't be included as this isn't collected during hospital intake process</p>
--	---	---	---	---	---

*AIM (Ally Identity Measure): assessing the knowledge and presence of skills to support LGBTQ+ individuals, including openness and support, and awareness of oppression faced.

Comments: Outside of the discrimination faced in their daily lives, in addition to internalized oppression, a large quantity of barriers to healthcare for LGBTQ+ individuals arise due to healthcare providers' attitudes. This is compounded by their lack of education regarding their patients' needs and the other associated challenges patients face in accessing adequate care. As seen in these articles, this has the potential to be remedied through LGBTQ+-specific cultural competency education, whether this be administered during a paramedic's entry into practice curriculum, or as part of continuing medical education while on the job. Such education would provide the knowledge needed to provide unbiased and affirming emergency care to LGBTQ+ patients, while also improving attitudes towards the population in general. Facilitating positive and accepting attitudes in healthcare providers, including those involved in prehospital care, allows for patient experiences that are more supportive and of a higher quality. This is important to current practice as LGBTQ+ patients will feel seen and heard by their carers, strengthening the paramedic-patient relationship and enhancing all further care.

The majority of data available was qualitative research based, allowing an exploratory look at the experiences and outcomes of education for healthcare providers. However, further research is required to formulate an adequate evidence base for future clinical practice. This could include: effectiveness of LGBTQ+-specific cultural competency training for working paramedics, amalgamating paramedic providers and LGBTQ+ narratives for immediate and long-term solutions, and examining intake forms for inclusiveness.

It should be noted that LGBTQ+ individuals are disproportionately affected by certain healthcare risks (substance use, mental illness, homelessness, discrimination and violence, etc.) which needs to be taken into consideration when treating as a paramedic.

Consider: These articles are either excluded from the PEP LOE Scale or are LOE 3, which means that clinical decisions should not be based solely off of this research. There is also an overarching lack of research concerning prehospital treatment and paramedic attitudes towards LGBTQ+ individuals more broadly. Many operational changes may need to be made to facilitate this research, including collecting gender identity and sexual orientation information in a sensitive way during documentation. Further research must also recognize additional divisions in the LGBTQ+ community as related to compounding experiences of oppression through the identification with various marginalized identities. These experiences may act as protective or additive factors.

Clinical Bottom Line: There were limited studies directly involving paramedic training concerning LGBTQ+ and gender diverse individuals; however, the existing literature from emergency departments and other healthcare providers is a relevant resource for paramedics to educate themselves about LGBTQ+ individuals and the strategies for providing optimal care, equitably. Quality research should be undertaken to support the widespread education and training of healthcare providers, including paramedics, about the importance of LGBTQ+ health and prevalent disparities.

References:

- Bristol, S., Kostelec, T., & MacDonald, R. (2018). Improving Emergency Health Care Workers' Knowledge, Competency, and Attitudes Toward Lesbian, Gay, Bisexual, and Transgender Patients Through Interdisciplinary Cultural Competency Training. *Journal of Emergency Nursing*, 44(6), 632–639. <https://doi.org/10.1016/j.jen.2018.03.013>
- Carter, A., Jensen, J. L., Petrie, D. A., Greene, J., Travers, A., Goldstein, J. P., Cook, J., Fidgen, D., Swain, J., Richardson, L., & Cain, E. (2018). State of the Evidence for Emergency Medical Services (EMS) Care: The Evolution and Current Methodology of the Prehospital Evidence-Based Practice (PEP) Program. *Healthcare policy = Politiques de sante*, 14(1), 57–70. <https://doi.org/10.12927/hcpol.2018.25548>
- CASP Checklists - CASP - Critical Appraisal Skills Programme Qualitative Checklist. (2018, May 1). Retrieved February 18, 2020, from <https://casp-uk.net/casp-tools-checklists/>
- Jalali, S., Levy, M. J., & Tang, N. (2015). Prehospital emergency care training practices regarding lesbian, gay, bisexual, and transgender patients in Maryland (USA). *Prehospital and Disaster Medicine*, 30(2), 163–166. <https://doi.org/10.1017/S1049023X15000151>
- Vermeir, E., Jackson, L. A., & Marshall, E. G. (2018). Barriers to primary and emergency healthcare for trans adults. *Culture, Health and Sexuality*, 20(2), 232–246. <https://doi.org/10.1080/13691058.2017.1338757>