

Theatre as a Teaching Tool for medical students with respect to paediatric cancer:

Development and Integration into Core Undergraduate Curriculum



Paul D'Alessandro¹, Gerri Frager^{2,3}

Faculty of Medicine¹, Department of Paediatrics², Division of Paediatric Palliative Care, Dalhousie University, IWK Health Centre, Halifax, NS, Canada

BACKGROUND

- *Ed's Story: the Dragon Chronicles* is a verbatim play created using the journal entries of Ed, a 16 year old with advanced cancer and transcripts from 25 interviews conducted after his death with his family, friends, and health professionals.



Figure 1: Promotional poster for the 2010 Atlantic Fringe Festival production.

- Performed across Canada September 2010-November 2011 (Figure 1).

- Integrated into the Dalhousie University medical school core undergraduate curriculum in May 2012.

RESEARCH AIM

The aim of this retrospective study was to collect responses of medical students and residents who had seen a performance of *Ed's Story: the Dragon Chronicles*, and to compare responses from trainees who saw it voluntarily in an extra-curricular setting to those who viewed it as part of mandatory curriculum.

METHODS & PARTICIPANT CHARACTERISTICS

This was a non-randomized cross-sectional study. A confidential, web-based survey was created using Opinio Survey Software. Medical trainees who had viewed a performance were eligible to participate. Participants were asked a mixture of open- and close-ended questions. Close-ended questions were asked on a 5 point Likert scale. Respondents were given the option to select "I Don't Know" or refrain from answering.

Responses were qualitatively analyzed for recurrent themes. Categorical data was quantified and presented using descriptive statistics. Respondents from the pilot cohort were invited to a post-survey focus group held in January 2012, prior to integration into curriculum in May 2012.

PARTICIPANT CHARACTERISTICS:

Pilot Cohort (Voluntary, Extra-Curricular Viewing):

46 medical trainees from Dalhousie University, Queen's University, the University of British Columbia, University of Saskatchewan, and the University of Ottawa

- 60.9% female, 39.1% male, mean age 26.2 ± 3.2 years
- 69.6% pre-clerkship students, 30.4% senior medical students or residents

Focus Group:

- 11/46 above survey participants left contact information
- 7 trainees from Dalhousie University participated

- 85.7% female, 14.3 % male
- mean age 26.9 ± 5.8 at initial viewing
- 71.4% pre-clerkship at initial viewing

Curriculum Cohort (Mandatory, Curricular Viewing):

- 60/84 eligible trainees from Dalhousie University 2nd year MD programme (71.4% response rate)
- 68.3% female, 31.7% male, mean age 26.0 ± 2.9

RESULTS

A strong majority of trainees in both cohorts agreed that the play was a good learning experience, taught them lessons they will use in their medical careers, and should be experienced by all medical students (Figures 2 and 3).

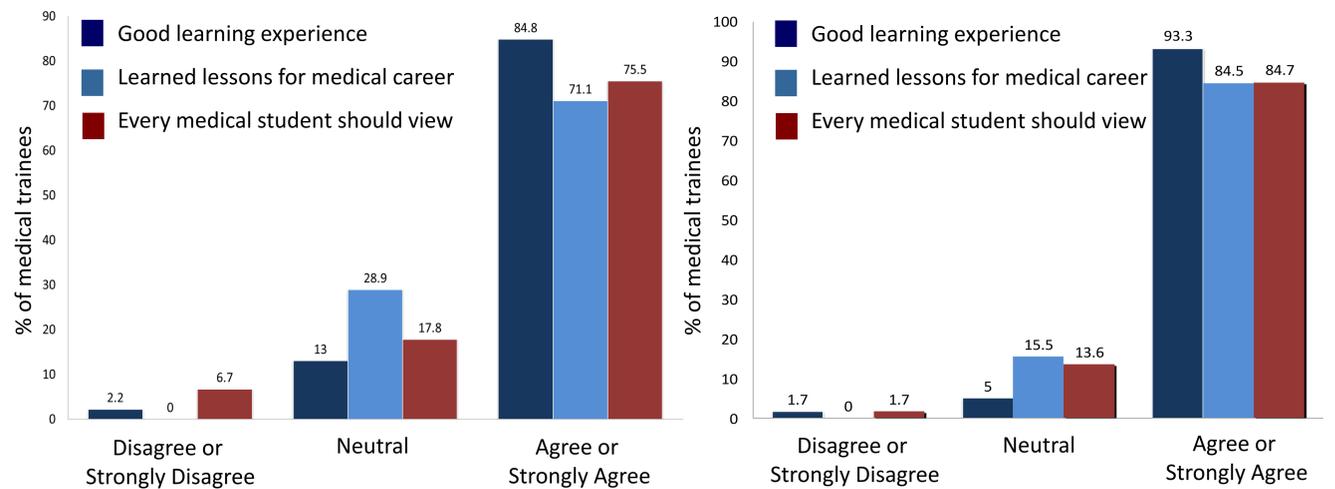


Figure 2. Pilot Cohort: Student responses to quantitative questions. Figure 3. Curriculum Cohort: Student responses to quantitative questions.

Trainees in both cohorts reported that the play was realistic, reminded them about humanity in medicine, and effectively demonstrated multiple perspectives and interdisciplinary care.

"The play brought back the idea of humanity in medicine... Medical school instruction tries to teach us things right down to how we should express empathy... like they are slowly turning me into a robot... This [brought] back the idea of what medicine is supposed to be about."

"As medical students, we are often given workshops that try to describe an inter-disciplinary experience. These scenarios are often contrived... *Ed's Story* [presented] the health care team... in a much more meaningful way for me to understand..."

Trainees in both cohorts reported that they gained new insight into patients' experiences, the play complemented clinical experience, and that they preferred it to other teaching modalities.

"If Ed, at 16, can be this insightful, it reminds me how much I have to learn about each new patient... Allowing myself to experience this case through theatre made it a safe experience... A primer, making it easier for me to handle [later.]"

"Going in, I wanted to know what [type of] cancer he had, leaving I realized it didn't really matter."

"Emotional and therefore memorable... Easy to sit through... Talking about these concepts in lecture just doesn't translate... A play is different... than all other teaching tools in our curriculum, so it was a nice change and kept my attention... This play breaks through the two-dimensionality of paper... It elicits raw emotion [better than] a journal article or a problem-based learning case."

More trainees in curriculum cohort agreed viewing should be integrated into curriculum compared to pilot cohort.

Trainees in the pilot cohort gave a mixed response to potential incorporation into core curriculum. A post-survey focus group cited curriculum demands and fear that the play and post-performance reflections may lose their potency in a mandatory academic setting as reasons for this discrepancy. The focus group suggested an ideal context for the play (Table 1.) These suggestions were implemented for the curriculum performance in May 2012. Compared to the pilot cohort, a greater percentage of trainees in the curriculum cohort agreed that a viewing should be incorporated into the medical curriculum (86.7% vs 45.3%, $\chi^2=20.3$, $p<0.001$, Figure 4.)

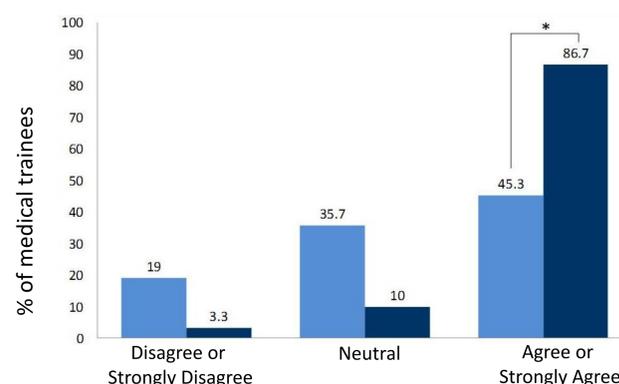


Figure 4. Pilot Cohort vs. Curriculum Cohort: Response to play's potential incorporation into medical school curriculum.

Table 1. Focus Group: Ideal Context for the Play

The focus group suggested:

1. view pre- or during clerkship
2. during half-day or retreat to optimize student appeal
3. non-academic setting (theatre, multi-purpose room, lights off)
4. post-performance facilitated discussion

CONCLUSIONS & FUTURE DIRECTIONS

- Medical trainees in both cohorts agreed that the play was a good learning experience, should be experienced by all medical students, and taught them lessons they will use in their medical careers.

- Comments highlighted the play's realism and effectiveness at demonstrating interdisciplinary care. The play generated new insight and complemented clinical experience. Trainees preferred it to other modalities, including simulated patients, lectures, and problem-based learning cases.

- Compared to the pilot cohort, a greater percentage of trainees in the curriculum cohort agreed that a viewing should be incorporated into core medical curriculum (86.7% vs. 45.3%, $\chi^2=20.3$, $p<0.001$.)

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Ed's Story

The Dragon Chronicles



“It was interesting to hear one doctor talk candidly about his desire to be liked and how that clouded his judgement... I think that’s something a lot of medical students desire... It was intriguing and comforting... to know that staff physicians experience the same hesitations, fears, and frustrations that we do.”

“Initially, I wasn’t convinced this would fit the curriculum. I was pleased that it turned out to be a great experience...”

“Going in, I wanted to know what [type of] cancer he had, leaving I realized it didn’t really matter.”

“Emotional and therefore memorable... Easy to sit through... Talking about these concepts in lecture just doesn’t translate... A play is different... than all other teaching tools in our curriculum... a nice change and kept my attention.”

“Much [better] than a journal article or problem-based learning case...”

“I think I would have liked to view the play with only students... That being said, seeing it outside the medical school made it more of a personal experience...”

“If Ed, at 16, can be this insightful, it reminds me how much I have to learn about each new patient.”

“The play brought back the idea of humanity in medicine... Our medical school instruction tries to teach us things right down to how we should express empathy... like they are slowly turning me into a robot... We are told exactly how to phrase things until it feels fake. This helped bring back the idea of what medicine is supposed to be about.”

“This play could be useful in showing communication and empathy as it actually occurs in our careers, not in the fake ‘simulated-patient way’.”

“While the play was interesting and entertaining, I’m not sure exactly what it ‘taught.’ I suppose the play underlined the importance of [patient-centred care], but I don’t know that it really added a new perspective to things already in the curriculum... Using humour and understanding suffering are both valuable lessons, but they are hard to quantify.”