

ART MAKING IN A FAMILY MEDICINE CLERKSHIP: HOW DOES IT AFFECT STUDENT EMPATHY?

Chen JY¹, Potash JS^{1,2}, Lam CLK¹, Chau VTW¹

¹Dept of Family Medicine and Primary Care, LKS Faculty of Medicine, HKU

²Centre on Behavioral Health, Faculty of Social Sciences, HKU



Introduction

To provide patient-centred holistic care, family doctors in particular must possess good interpersonal and empathic skills.¹ Medical schools traditionally adopt a skills-based approach to such training but creative engagement with the arts has also been effective.² A novel arts-based approach may help medical students in Hong Kong setting develop empathic understanding of patients.

Aim To examine how an arts-based activity affects medical student empathy.

Methods

This was a mixed-method quantitative-qualitative study. In 2011-12, all 161 third year medical students at the University of Hong Kong were allocated into either an art-making workshop or a conventional skills workshop. Each 3-hour workshop was run by the same facilitators, in the same venue. It was a compulsory learning activity in the Family Medicine clerkship which was spread out over 10 weeks. Students in the art-making workshop wrote a poem, created artwork and completed a reflective essay while students in the conventional workshop problem-solved clinical cases and wrote a case commentary. All participants completed the Jefferson Scale of Empathy (JSE) (student version), at the start and end of the clerkship. The JSE-S is a 20-item self-completion questionnaire with good psychometric properties (7-point Likert scale, higher score implies higher empathy, maximum score is 140). **Quantitative data analysis:** Paired *t*-test and repeated measures ANOVA were used to compare the change within and between groups respectively. A *p*-value ≤ 0.05 was considered statistically significant. **Qualitative data analysis:** Two researchers independently chose representational narratives based on criteria for assessing quality art adapted from art therapy. The final 20 sets of work (art, poem and reflective writing) were agreed upon by consensus. These were then thematically analyzed using a grounded theory approach. Three researchers independently coded 7-8 works and met to assure inter-rater reliability.



Art workshop activities

Centering Practice	Mindful breathing and body relaxation
Guided Visualization	Evoke memory of pain or suffering encountered during medical training
Poetry	Created from descriptive words related to evoked memory (colors, sounds, smells, objects, actions, feelings,...)
Drawing or Painting	Naturalistic, symbolic or abstract image based on poem
Display and Discussion	Exhibit viewing with facilitated small and large group discussion
Reflective Writing	Homework submitted at end of the rotation

Results

Students who completed at least 1 questionnaire: 152/161 = 94%

Students who completed both questionnaires: 106/161 = 66%

Quantitative

The quantitative results showed a decrease in JSE scores over time within groups but no statistically significant difference between groups. There was no association of demographic characteristics with empathy.

Mean JSE scores at start/end of clerkship & significance of within/between group difference

N=106	Pre-score Mean (SD)	Post-score Mean (SD)	<i>p</i> -value	<i>p</i> -value
Art group (n=48)	106.6 (12.4)	102.2 (14.3)	0.01	0.13
Control group (n=58)	107.2 (11.5)	106.6 (14.7)	0.73	

Discussion and Conclusion

Consistent with the literature, empathy declined over time in medical school.³ Though quantitative findings showed no difference in empathy between groups, participants clearly gained understanding of patients, doctors, pain and suffering, and self, as assessed through 3 separate outputs. The discrepancy with the quantitative results may be due to the short duration of the intervention, JSE-S was not suitable for HK students, inadequate sample size to show a difference or it is possible the workshop really did not enhance empathy. However, the arts-based approach demonstrated medical students can reflect on the caring aspect of medicine which contributes to empathic understanding, a key aspect of good clinical care.

Acknowledgements

This study was approved by the Human Research Ethics Committee for Non-Clinical Faculties at The University of Hong Kong (Ref. No. EA150811). This project was funded by the Development Fund for Medical Humanities, Li Ka Shing, Faculty of Medicine, The University of Hong Kong. We wish to thank Jefferson Medical College for granting permission to use the JSE (student version) and the HKU MBBS Class of 2014 for participating in this study.

Qualitative

The qualitative analysis of student creative work revealed 4 thematic categories: understanding gained in relation to self, patients, pain and suffering, and the role of doctor.

Self

- Recognize own feelings
- Cope with feelings
- Own limitations
- General self-awareness
- Existential concerns

Patient

- Empathy
- Holistic/patient-centered care

Tian—a 16-year-old wheelchair-bound boy suffering from familial muscular dystrophy. “...felt slightly helpless to realise that as doctors, it is almost impossible to put ourselves into a patient’s shoe and offer condolences or psychological support, I believe that if there is anything that we can do for them, we should do it as little as it seems.”

Pain and Suffering

- Awareness of Presence
- Duality of Pain and Suffering
- Expanded View of Pain and Suffering
- Distinguish between physical pain and mental suffering

Sunrise-sunset
“I hoped observers would interpret my picture as either a sunrise or a sunset scene. Pain and suffering could also be understood as blessing or as curse depending on perspectives.”

Role of Doctor

- Alleviate emotional pain
- Alleviate physical pain
- Contribute to pain

Description: an old man standing right in front of the sea, with the background reflecting a feeling of loneliness “Medical health is no longer solely about physiological health but emphasize a holistic care in which psychological and social health are also included.”

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