FINAL REPORT ON UNIVERSITY TEACHING DEVELOPMENT GRANT

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Title of Project: "The Empathy Project: One year postgraduate follow up on empathic motivational interviewing skills"

Date on letter notifying award of grant: 30.11.11

General progress report: The 2012-3 project is now complete.
This particular project is the postgraduate phase of the larger Empathy Project which has achieved a number of outputs including two PBRF publications and several national and international presentations (listed in Dissemination of Project Results below).
Data collection for the third phase of the project was completed in March 2013 and further analysis and outputs will be achieved during the year.

Specific objectives achieved and any notable successes: The Empathy Project is a longitudinal study that investigates medical student learning of brief intervention (BI) and motivational interviewing (MI) skills through role play by comparing the learning of skills in successive cohorts of 5th year medical students in 2009, 2010 and 2011 through into their 6th year and beyond. The intended aim in this phase of the wider project was to explore the subsequent development and use of these skills during their first postgraduate year (PGY1) as junior doctors, using a specially designed questionnaire. Specific objectives of the PGY1 phase were:

1. To investigate how newly graduated doctors use empathic motivational interviewing skills in their professional role
2. To identify any barriers that newly graduated doctors experienced or percieved to employing empathic motivational interviewing skills
3. To contribute data to the longitudinal research project on teaching and learning of skills of empathy, to inform workforce development in the skills of empathic Brief Intervention and Motivational Interviewing.

This postgraduate project consisted of two data collection rounds in 2012 and 2013. In the 2012 data collection round, 2010 and 2011 graduates of the University of Otago Wellington who had been appointed to a PGY1 post in New Zealand were contacted directly and individually (by post) to participate in the study. They were followed up once by post, once by text and once on Facebook. The response rate was 30% (16/53), low response being attributed to: 1) uncertainty of physical address/lack of electronic address (both typically change after students leave medical school), 2) time prioritisation in the new house surgeon role, and 3) a lack of perceived benefit from continuing to be involved in medical school research.
In the 2013 data collection round a three pronged approach was therefore developed to try and improve the response rate: extending the pool of potential participants to include non-participants of the undergraduate Empathy Project and non-Otago graduates; adopting

different forms of recruitment (snowball or chain-referral sampling); extending the collection to any recent postgraduates.
The 2013 New Zealand Medical Association PGY1 Representative kindly arranged for the survey to be distributed to NZMA members via the email (360 junior doctors) and also distributed it through his own networks (number unknown). However, only 5 surveys were returned from this (including 1 more from the 2012 University of Otago graduate cohort).
This disappointing response rate was attributed to the some of the same factors (business of new working life, lack of perceived benefit), but an additional possible reason emerged from discussions with the PGY1 Representative. In his own words, communication skills, motivational interviewing and empathy were considered to be "dirty words" among his student cohort. Empathy was also reported [by a non-Otago graduate participant] to be taught in a patronising fashion at medical school, causing student resentment towards the subject.
This provides a very interesting insight into the need to package and present these subjects in a more meaningful and appealing way to undergraduate medical students.
Other reported barriers to employing empathic motivational interviewing skills at the postgraduate level included the time, workload, inappropriate setting (especially in hospitals), perception of impracticalities, lack of role modelling by senior clinicians, lack of knowledge.
These findings carry interesting implications for the implementation of undergraduate teaching and learning that have previously gone un-explored.

Specific objectives not achieved (plus a brief statement of the reasons):

The specific objectives were achieved in terms of identifying barriers and providing useful information for curriculum and workforce development. However, the intended longitudinal analysis of data is still to be completed using the grand total of 17 respondents who had participated, as University of Otago medical students, in the undergraduate part of the longitudinal study. N of 17 will carry limitations in regard to a meaningful statistical analysis and conclusions drawn about the application of those skills in postgraduate years.
However the low response rate does provide an interesting finding in its own right, and is consistent with reported difficulties recruiting from this particular cohort identified in our literature search. Our various recruitment strategies (mail-outs, email, text and Facebook) proved not as effective as the methodology adopted for the 2010/2011 University of Otago Summer Scholarship pilot study where postgraduate questionnaires were administered on site at participants' place of employment i.e. in a hospital, with electronic questionnaires also emailed to individual house surgeons and a hard copy delivered to their hospital mail boxes (and returned via the hospital internal mail). This pilot study had achieved a response rate of 48%.

Student groups directly involved in the project or whose learning might indirectly benefit from the project:

Student groups who have been directly involved in this project have sat year 5 Medicine final OSCE, either in 2010, 2011 or 2012 and some have since graduated from the University of Otago in 2011 and 2012. As a direct consequence of the undergraduate phases of The Empathy Project year 5 student cohorts of 2010 and beyond have received the actor-led workshop designed to enhance their understanding and portrayal of clinical empathy by becoming more

aware of how to "walk a mile in the patient's shoes". This was demonstrated to make a significant short-term difference to student skills. We are currently investigating the combined impact of the new curriculum and the empathy workshop intervention with the year 5 medical class of 2013. The research team are also interested in comparing year 5 Medicine student final OSCE performance for the control (2009) and intervention (2010) cohorts and with two cohorts that have also been exposed to the new curriculum (year 5 students in 2011 and 2013).

In the light of the findings of this postgraduate follow-up study it would be of interest to approach Medical Specialist Colleges to explore the eventual utilisation of empathic motivational interviewing skills further on in the postgraduate clinical setting.

In addition, at the start and end of 2013 a cohort of third year student nurses will be invited to complete a slightly rephrased version of the JESPI. This data may make it possible for comparisons to be drawn between two groups of health professionals, both of whom will be in their final year of study.

Details of dissemination of project results:

International Conference and other presentations:

2010: ANZAME Townsville (oral)

2010: AARE conference Melbourne (poster).

2011: Giesel School of Medicine Dartmouth University. D-CARE research group invited lecture: The Empathy Project.

2012: AMEE Ottawa Conference Kuala Lumpur. Project also submitted for consideration of the IMU-RHIME Award for educational innovations.

Other presentations:

2010: Centre for Medical and Health Science Education, Auckland

2010: Ako Aotearoa Spotlight, Christchurch

2010: National Association of Opiate Treatment Providers, Wellington

2010: GP combined departmental research weekend, Dunedin

2010: Matua Raki Leadership Seminar, Wellington

2011: Otago Teaching Spotlight Symposium, Dunedin

2012: ANZAPHE conference Rotorua (workshop)

Video sub-project outputs:

"Learning to Portray Empathy" *http://akoaotearoa.ac.nz/projects/learning-portray-empathy*.

Separately funded sub-project. Output was a web-based resource using video footage of good examples of student brief interventions.

"PACT" (Pregnancy Alcohol Cessation Toolkit). *http://akoaotearoa.ac.nz/projects/pact*.

Separately funded sub-project. Output was an additional health professional educational

resource. This extends the above video sub-project to include health professional information about empathy in longer, sensitive consultations. This resource uses the example of empathy in consultation with women about alcohol and the risk of Foetal Alcohol Spectrum Disorder.

International Peer Reviewed Journals:

BT Lim, H Moriarty, M Huthwaite, L Gray, S Pullon & P Gallagher. *How well do medical students rate and communicate clinical empathy? Medical Students.* Medical Teacher, 2012: e1-e6.

BT Lim, H Moriarty, M Huthwaite. *"Being-in-role": A Teaching Innovation to Enhance Empathic Communication skills in Medical Students.* Medical Teacher, 2011; 33(12): e663-9.

Financial information:

Attached.

Summary:

The Empathy Project is a prospective longitudinal cohort study of the teaching and learning of skills of clinical empathy, and subsequent application of these skills into postgraduate clinical settings. Empathy was identified as an undergraduate teaching and learning gap: it is a topic previously taught largely on the "hidden curriculum".

This postgraduate study has identified a number of barriers to the eventual utilisation of empathic motivational interviewing skills in the postgraduate clinical setting. These findings relate to the implementation of this fundamental skill for clinical communication success, with implications for teaching and learning that have previously gone un-explored.

The team are very grateful to CALT for successive grants to enable continuation of the longitudinal study The Empathy Project.

Signature:

Date: