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Impact of e-Health postgraduate education on careers and professional practices: a qualitative study

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Introduction

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➢ Growing evidence for effectiveness

➢ Many projects

➢ Allocation of funding

➢ Changes in policies

But …..

➢ Limited use in regular practice

➢ A numbers of reasons ….

Lack of education

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➢ Evidence of lack of education and training

➢ Education is not a priority

➢ No funding for education and training

➢ Lack of educational and training opportunities

• G.S. Lamb, K. Shea, Nursing education in telehealth. *Journal of Telemedicine and Telecare,* **26** (2006), 55-56.
• S. Edirippulige, A.C. Smith, Knowledge, perceptions and expectations of nurses in e-health: results of a survey in a children's hospital. *Journal of Telemedicine and Telehealth* **12** (2006), 35-38.
• S. Edirippulige, A.C. Smith, J. Young, R. Wootton, Knowledge, perceptions and expectations of nurses in e-health: results of a survey in a children's hospital. *Journal of Telemedicine and Telecare,* **12** (2006), 35-38.
• S. Edirippulige, A.C. Smith, H. Beattie, E. Davies, R. Wootton, Evaluation of nursing students' knowledge understanding and readiness to practice e-health, *Journal of telemedicine and telecare,* **13** (2007), 37-39.

Value of education

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➢ Evidence shows that education works

➢ University education/higher education

➢ Two particular purposes:

- to provide relevant knowledge and skills for practice

- to give qualification to advance careers

• M.H. Kelly, T.S. Murray, Motivations of general practitioners attending postgraduate education, *British   Journal of General Practice* 46(1996), 353-356.
• S. Fallows, C. Steven, *Integrating key skills in higher education*, Kogan Page, London, 2000.
• N. Savickas, Life designing: a paradigm for career construction in the 21 century *Journal of Vocational Behaviour* 75(2009), 239-250.

Education and Training in e-Health at UQ

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- Over 10 years
- Postgraduate programs/undergraduate
- Range of topics theories, technological solutions, evidence
- Blended learning (online and face to face)
- Nearly 1000 students undergraduate course
- Over the past 10 years nearly 80 postgrads

Objectives

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- To investigate subsequent professional careers of graduates
- To understand level of e-health use
- To examine level of satisfaction of learning experience

Methods

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- Survey using Survey Monkey (March 2011)
- To all graduates (2005-2010)= 39 graduates

- Survey examined:
  - demographics
  - satisfaction of learning experience
  - careers
  - e-health related practices

Results

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- 35 surveys completed (89% response rate)

Demographic characteristics of graduates who completed the questionnaire (n=35)		
	Number	**%**
Gender		
Female	15	43
Male	20	57
Age (years)		
20-29	2	6
30-39	15	43
40-49	12	34
50-59	5	14
>59	1	3
Current occupation		
Health/medicine	24	69
IT/business	9	26
Other	2	6
Length of time in occupation (years)		
<=1	5	11
1-2	6	17
3-10	10	28
>10	14	40
Educational qualifications		
Health/medicine	19	54
IT/business	12	34
Other	4	11

Satisfaction: e-Health program

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- 54% (n=19) Graduate Certificate
- 34% (n=12) Master of e-Healthcare
- 12% (n=4) Grad Dip e-Healthcare

- 91% (n=32) good or very good

Positive aspects

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- Flexible delivery mode
- Topics covered
- Case studies
- Assessment tasks were practically oriented
- Encouraged critical thinking about clinical use
- Coordinator was organised and instilled passion in the field
- E-learning tools (online forums, online lectures) created stimulating learning environment
- Activities such as project design was useful
- Student support
- Practical sessions were useful

Negative aspects

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- Written essays were boring
- Too many online activities; need more hands-on experience
- Sometimes I felt unsupported
- Not enough technical aspects covered
- Distance learning was challenging

Impact on careers

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- 83% (n=29) perceived e-health education helped in career development
- 77% (n=27) worked in e-health after graduation
- 66% (n=23) current work is related to e-health
- 88% (n=31) high satisfaction in their work
- 51% (n=18) tracking toward research higher degrees

How did e-health education help in career

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- Helped finding my current job in AusAID
- I am CEO of a not for profit organisation
- I teach courses in telehealth in a university
- I found a job in a leading GP organisation as e-health project coordinator
- I was promoted to the Director of National Telemedicine Program
- Found a job in a PACS unit in a tertiary hospital
- Advanced career as a medical educator

How did e-health education help your practice?

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- I use e-health as a medical officer in defence force
- As a doctor I use telehealth in my medical practice
- My organisation use e-health for helping parents and families of deaf kids
- I use e-learning tools in my work at the college of radiologists
- As a military nurse, I use e-health in operational areas
- As a telehealth officer, I am responsible for projects in my state
- As the Director of National Telemedicine Program, I coordinate a number of e-health projects

Why e-health education did not helped?

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- No demand for e-health in my workplace
- Very limited e-health jobs in defence
- E-health is not well established in my state
- Finding a job in e-health is hard
- My career progressed outside e-health
- My career was satisfactory without e-health

Discussion

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- ➢ Some 80 students graduated over 10 years
- ➢ This number is not large compared to other programs such as business, medicine, public health
- ➢ Other e-health programs are similar
- ➢ The objective of this program to build workforce
- ➢ Results show the objective is being achieved
- ➢ Majority of graduates had health or medical background
- ➢ Majority already employed

Conclusions

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- ➢ Overall, graduates thought e-health study had positive effect
- ➢ Some thought they found jobs thanks to e-health study
- ➢ Others thought e-health study helped in their practice
- ➢ However the numbers in the program are small, due to lack of professional pathways in niche field
- ➢ Demand for e-health qualification may grow in the future