What is the evidence for student clinical learning in under-served areas?

Talk for Teikyo University

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Background

- **Health care inequalities**

- People with particular demographic variables,

who live in certain settings,

suffer many disadvantages implicating their health. (Goddard, 2010)

Under-served areas: Associated with poorer health outcomes as populations disproportionately suffer from diseases related to poverty, substance abuse, and the worsening of mental illness related to living in a deprived environment. (Riva & Curtis, 2012)

Geographical areas: worldwide issue

Rural & Remote:

In Australia, people living in rural areas tend to suffer greater poverty, shorter lives and higher levels of illness than those living in metropolitan areas. (Schofield, 2012)

Inner-city:

In the UK, areas of poverty have been classified as five main types: inner London, areas with inner-city characteristics, coastal industry, coalfields, and manufacturing. (Glennerster, 1999)

In Japan, to identify under-served areas precisely, it is necessary to set the geographic unit of analysis as small as possible and measure the geographic accessibility itself. (Matsumoto et al. 2013)

GP (General Practitioner) shortages in certain areas – why?

Work environment

Patients who live in under-served areas may be more challenging for healthcare professionals as they often have more psychosocial and behavioural difficulties, multiple illnesses, and long-term health problems that impact on their health compared to patients in less deprived areas. (Popay, 2007; Mercer, 2007)

Self-reported GP stress level was significantly higher during clinical encounters with patients from more deprived areas. (Mercer, 2007)

Lifestyle

GPs tend to prefer to live and work in areas with low deprivation. (Goddard, 2010)

What can be done to address workforce shortages?

A systematic literature review of undergraduate clinical placements in under-served areas

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(*Medical Education*)

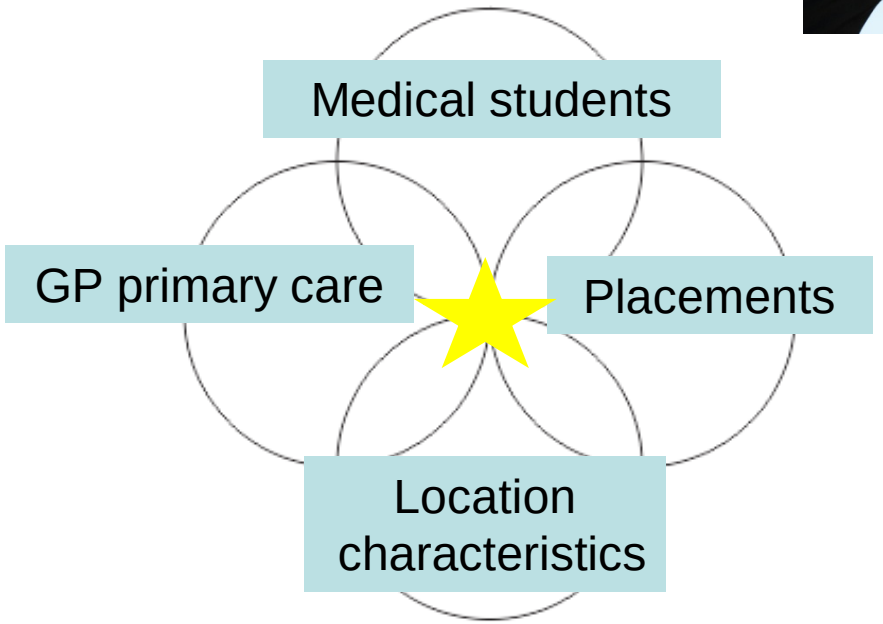
Undergraduate medical education

- The occurrence of undergraduate placements in under-served areas is increasing across the world.
- Often started in response to workforce shortages.
- Community placements often generalist in nature in primary care settings, sometimes labelled as non-traditional.
- A collective understanding of these placements is lacking.

- **Aim:** To identify and evaluate published initiatives that increase exposure for medical students to under-served areas

Search Strategy

Exploring four concepts:



Search techniques: Database searching, citation searching, reference list checking, pearl growing, use of own literature

Study characteristics

- 54 articles identified
- Most studies report data from rural and remote locations (n=47)
- Most frequently from Australia (n=26), USA (n=15) and Canada (n=7)
- 18 studies reported placements < 7 months
- 29 studies reported placements ≥ 7 months

Four themes identified:

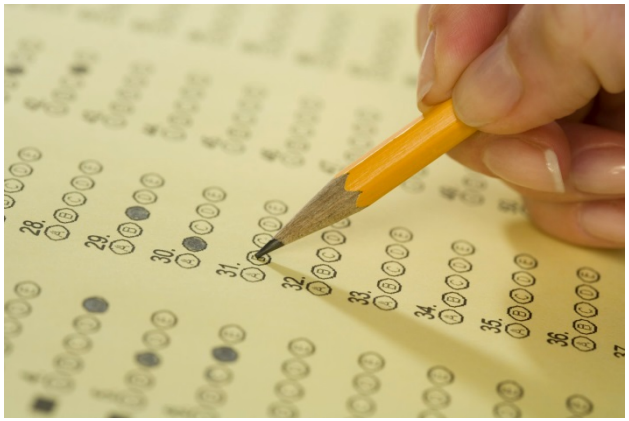
1) Student performance

2) Career pathways

3) Student perceptions

4) Supervisor experiences

1) Student performance



- Student examination scores did not significantly differ by taking a non-traditional placement (Zink *et al.* 2010; Schauer & Schieve, 2006)

- Tentative pattern of increased clinical proficiency among non-traditional placement students (Bianchi *et al.* 2008; Smucny et al. 2006)

2) Career pathway

- Rural background students more likely to pursue rural practice *(Williamson et al. 2003; Eley et al. 2009)*
- All students (regardless of background) were encouraged towards rural practice *(Woloschuk & Tarrant, 2002; Critchley et al. 2007)*

3) Student perceptions

- Holistic approach to primary care, developed psychosocial understanding, breadth of opportunity, increased capability, responsibility, integration with community *(Couper et al. 2011; Nyangairi, 2010)*

- Nature of consultations not providing appropriate material, learning objectives not met, logistical issues *(McNiff et al. 2009; Critchely, 2007)*

4) Supervisor experiences

- Giving something back to medical education, internal motivation, refining practice *(Baritt, 1997; Hudson, 2011)*

- Concerns over how teaching fits the curriculum, nebulous roles, unprepared *(Worley et al. 2000; Baker et al. 2003)*

Why are these placements effective?

Continuity: stability over time *(Hirsh et al. 2007)*

Symbiosis: mutually beneficial relationships between students, doctors, University and the community *(Worley et al. 2006)*

Discussion

- Under-served area placements developed student clinical knowledge, confidence, interpersonal skills and increased the likelihood of them returning to work in the area.

- To develop these professional capabilities are principles that may benefit all medical students, regardless of their future roles.

Conclusions & further work

- Under-served area placements identified positive benefits for students, supervisors and the community.
- Increasing evidence for rural and remote areas.
- Little research in relation to other under-served areas including inner-city, deprived areas.

Thank you for listening!

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