An interprofessional and international initiative on the role of health sciences faculties in achieving United Nations Millennium Development Goals

Universitas 21 UNMDG Group
Gillian Webb, Grahame Pope, Kendall Ho, Derek Chambers, Niv Patil, L.C. Chan, Colman McGrath, Manuel Perez, Jacinta Tobin, Caroline Voisine

- Established in 2000
- A collaborative network for international higher education [Universitas 21](#)
- The U21 Health Sciences membership includes Dentistry, Health and Rehabilitation Sciences, Medicine, Nursing, Pharmacy and Public Health.
United Nations Millennium Development Goals
UN MDGs to be achieved by 2015

• 8 major goals subsume
• 18 subsidiary targets and
• 48 indicators

U21 Health Sciences Group and UNMDG initiative

- Health educators and students to promote and participate in activities related to UNMDGs
- Electives
- Special study modules
- Case studies
- Website
UNMDG curriculum

Promotion through education at
- Universities
- Schools

Prime aims
- Awareness
- Dissemination
- Participation

Case studies
- 9 case studies developed
- Student guides
- Tutorial notes
- Versatile – PBL
  - IPL
  - Inter-professional or
  - Uni-professional
Example of Case Study

- **Abstract:**

Rosario comes to you in at a community health clinic in rural Timor Leste. Rosario is a 37 year old father of 4 children. He tells you that he is recovering from tuberculosis that was first diagnosed 9 months ago. His main concern is that he cannot work in his small tobacco plantation due to back pain he has had since first becoming unwell.
Example of Case Study

**Tutorial 1: Patient Presentation**

Rosario reports that he was first diagnosed with TB when a community TB team came to his village 9 months ago. At the time he had been feeling unwell with fevers, night sweats and loss of appetite. He also had developed a constant deep lower back pain that was not relieved by rest. Months of treatment eased his symptoms but his back pain has persisted. His pain is most prominent centrally in the thoracic and lumbar regions but does not radiate past his buttocks. He reveals that although he still on medications for tuberculosis, he sometimes avoids taking them because they make him nauseas.

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**PBL sessions Hong Kong, 2011**

**February 2011**
Interprofessional PBL tutorials by group of Medical, Dental and Nursing students. Students felt that PBL allowed them to raise issues and propose solutions related to UNMDGs.

**June 2011**
Asian Medical Students Association Conference. 500+ participants. Only 20% students were aware of UNMDGs prior to case presentations and lectures.
UNMDG Student workshops 2011-2012

- June 2011: University of Nottingham
- November 2011: Tec de Monterrey
- June 2012: Lund University

- Multiprofessional workshops: nursing, medical, dental, midwifery, PT, OT, pharmacy & nutrition students.
- Students from different universities
- PBL/case study approach

Some outcomes:
- raised awareness of UNMDGs
- collaborative learning
- promoted an understanding global citizenship
- ethical aspects
- local application

CASES
Evaluation

- Survey tool developed

- Scholarship for a PhD student:
  - Evaluation
  - Publication

Approach

1. KNOWLEDGE CHANGE
   - Pre and post workshop
   - How did knowledge change?
   - What contribution did workshops make?

2. STUDENT SATISFACTION
   - Quantitative
   - Qualitative

3. BEHAVIOUR CHANGE
   - What were they surprised to learn?
   - Impact on future behaviour?
### KNOWLEDGE CHANGE

<table>
<thead>
<tr>
<th>Pre Workshop</th>
<th>Post Workshop</th>
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<tbody>
<tr>
<td>Excellent</td>
<td>1%</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>21%</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>38%</td>
</tr>
<tr>
<td>Somewhat Satisfactory</td>
<td>29%</td>
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#### THEMES

<table>
<thead>
<tr>
<th>Themes</th>
<th>Supporting Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased knowledge or awareness of MDGs</td>
<td>“Before I had no idea about the UNMDGs, I have a much clearer picture now”.</td>
</tr>
<tr>
<td>How MDGs are personally relevant and have practical application</td>
<td>“I have a deeper knowledge and understanding of the goals and how to implement them into our own world and field”.</td>
</tr>
<tr>
<td>Highlighted challenges of UNMDGs</td>
<td>“It highlighted the challenges of trying to achieve the UNMDGs”</td>
</tr>
<tr>
<td>Relationship of UNMDGs to local setting</td>
<td>“It helped me see how relevant the goals are for all communities, even in Australia”.</td>
</tr>
<tr>
<td>Influence of culture/importance of multidisciplinary approach</td>
<td>“Reinforced understanding of socioeconomic determinants on health”</td>
</tr>
<tr>
<td>Disease specific information</td>
<td>“Prevalence of otitis media in Aboriginal communities”</td>
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</tbody>
</table>
STUDENT SATISFACTION OF WORKSHOP

- Quantitative measures
  - Content
  - Format
  - Tutors
  - Interaction

- Qualitative measures
  - Themes
  - Helpful
  - Not helpful
  - How can be improved

WHAT THINGS MOST HELPFUL?

<table>
<thead>
<tr>
<th>THEMES</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Interaction</td>
<td>“Group work is brilliant, chance to meet lost of other people from lots of countries”</td>
</tr>
<tr>
<td>Tutors</td>
<td>“Instructors were helpful, gave insight into the UNMDGs and were good to interact with”</td>
</tr>
<tr>
<td>New approaches</td>
<td>“Helped me to think outside of the box, and of new ways to approach a problem.”</td>
</tr>
<tr>
<td>Real world application</td>
<td>“I can apply the cases to personal experience and knowledge and they seem to be very real or related to the world.”</td>
</tr>
<tr>
<td>Case studies/structure format</td>
<td>“The components of the case study motivate me to think and learn about some aspects in health care that I am not familiar with.”</td>
</tr>
<tr>
<td>Background info/Resources</td>
<td>“The handouts for UNMDG were detailed and useful”.</td>
</tr>
<tr>
<td>Application to local context</td>
<td>“Content gave us a way to think about the UNMDGs in a way that was relevant to our future work in our Australian community”</td>
</tr>
</tbody>
</table>
### WHAT THINGS LEAST HELPFUL?

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Too much information</td>
<td>“It was a big case for 3 hours! A lot to discuss and research”</td>
</tr>
<tr>
<td>Too little information/ lack of time or depth</td>
<td>“Lack of time...I would've preferred to analyse the case deeply”</td>
</tr>
<tr>
<td>Lack of structure/focus of day</td>
<td>“No clear understanding of what we were to take from the session or what was important in future practice”.</td>
</tr>
<tr>
<td>Tutor/Facilitator</td>
<td>“More direction would have been useful”</td>
</tr>
<tr>
<td>Lack of resources/Need for references prior</td>
<td>“The absence of prior learning material”</td>
</tr>
<tr>
<td>Cases unrelated to MDGs</td>
<td>“The questions didn’t relate to the MDGs so we didn’t discuss them”</td>
</tr>
<tr>
<td>Local context only</td>
<td>“There was far too much focus on Aboriginal health for a topic on millennium development goals”.</td>
</tr>
<tr>
<td>Need for more interaction/interprofessional involvement</td>
<td>“The teaching method is a bit boring. More interaction is suggested”.</td>
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### HOW COULD THINGS BE IMPROVED?

<table>
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<tr>
<td>Discuss history of MDGs/ link to case</td>
<td>“We would like to know first about the history of the MDGs and which goals have been reached”</td>
</tr>
<tr>
<td>More cases</td>
<td>“Having more cases and a gradual build up of the complexity of the case would be helpful to aid understanding.”</td>
</tr>
<tr>
<td>More time/depth required</td>
<td>“Due to the limited time we didn’t manage to address all the issues that we would like to discuss”</td>
</tr>
<tr>
<td>Clearly define goals of session</td>
<td>“I think the objectives of the case studies should be made clearer at the start”.</td>
</tr>
<tr>
<td>Need pre-reading/more resources</td>
<td>“It would be more helpful to be able to get the case beforehand and for there to be a sufficient copy for everyone.”</td>
</tr>
<tr>
<td>Provide global perspective</td>
<td>“Make cases more general and able to be applied to a more global perspective”.</td>
</tr>
<tr>
<td>Improve overall organisation/structure</td>
<td>“The structure of the questions were very vague”</td>
</tr>
<tr>
<td>More guidance from tutor</td>
<td>“Need more guidance and engagement from tutor”</td>
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BEHAVIOUR CHANGE

- What were you surprised to learn?

- Future plans

  1. Elective abroad
  2. Volunteer overseas
  3. Work in area of global health (UN/WHO)
  4. Local work
  5. Spread the word
  6. Further self-education

WHAT WERE YOU SURPRISED TO LEARN?

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<tbody>
<tr>
<td>UNMDGs relevant even in developed countries</td>
<td>“That the UNMDGs are applicable all over the world, not just in places that pop to mind first, for example Africa”.</td>
</tr>
<tr>
<td>Disparities with regard to indigenous health</td>
<td>“Poor hygiene standards by minority groups existing in a nation as developed as ours”</td>
</tr>
<tr>
<td>Importance of holistic care of patient/impact of culture on health</td>
<td>“I have learn to care for patients as a whole instead of just focusing on my field of expertise”</td>
</tr>
<tr>
<td>Disease specific information</td>
<td>“Facts about HIV/AIDS in China”</td>
</tr>
<tr>
<td>Challenge of reaching MDGs</td>
<td>“I have learnt about the interaction between the different MDGs and the challenge of reaching the goals”</td>
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<tr>
<td>Novel teaching method</td>
<td>“I had not seen the PBL style of teaching before”</td>
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Summary/conclusions from evaluation

- Positive impact on students understanding and awareness of UNMDGs
- Interprofessional interaction and case study format well received
- Structure and background set up important
- Need for adequate time to explore case studies and UNMDGs in sufficient depth

Summary/conclusions from evaluation

- Significant number of students unaware of health discrepancies within own country
- Increased understanding of holistic approach to care of patient/impact of culture on health
- Important to relate back to own reality, practical application
- Creates seed for further exploration, behaviour change, interest in global health networks.
Future work

- Complete cases
- Post on website
- Support student group
- Work with UN for post 2015
  - Disability
  - NCD’s
  - Mental illness

www.u21mdg4health.org