Status of Medical Education Reform at Saga Medical School Six Years after Introducing PBL

Yasutomo Oda M.D., Ph.D.
Saga University, Japan

Introduction to PBL workshop @ Honolulu 2008

My Background
- Associate Professor, Research and Education Center for Community medicine, Saga University
- Chairman of PBL curriculum
- Former Associate Director, Department of General Medicine, Saga University Hospital
- Advisor, Program for Medical Education in East Asia, JABSOM
- Visiting Scholar at OME, JABSOM in 2006
- Member of Research Development Committee for Medical Education, Japanese Society of Medical Education

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Saga Medical School
- Active medical school in one of smallest prefectures in Japan
  - Saga has almost smallest area, fewest population and product in Japan
  - Curriculum to provide first-rate education to be good community doctor
- Structure
  - 95 medical students a class
  - 50 nursing students a class
  - 151 medical and 31 nursing faculties

SMS curriculum
- Phase I : Liberal Arts
- Phase II : Basic Medicine (overview)
- Phase III : Clinical Medicine
  - Organ-based curriculum integrated with Basic Medicine
  - PBL, from 2002
- Phase IV : Clinical Clerkship
- Phase V : Elective Course

PBL introduction to Phase III in 2002

CM: clinical medicine lecture series
BM: basic medicine lecture series and laboratory work
CRL: Case-related Lecture by content expert
SDL: self-directed learning

Today’s contents
- Object
  - Share our 6-year experience introducing Hawaii style PBL into Japanese educational environment

1. Presentation (15min)
   1) Summary of PBL in Saga
   2) Issues and new challenge
2. Discussion (15min)
Comparison of phase III contents

<table>
<thead>
<tr>
<th>Contents of Phase III</th>
<th>2001</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>hr (%)</td>
<td>hr (%)</td>
</tr>
<tr>
<td>Lectures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Clinical Medicine</td>
<td>1177</td>
<td>527</td>
</tr>
<tr>
<td>- Basic Medicine and Laboratory</td>
<td>958</td>
<td>468</td>
</tr>
<tr>
<td>PBL Tutorial</td>
<td>204</td>
<td>59</td>
</tr>
<tr>
<td>Self-directed learning</td>
<td>134</td>
<td>757</td>
</tr>
</tbody>
</table>
| total                | 1311  | 1557  

* A total of 45 cases are used in phase III PBL
* Lecture were reduced to half in PBL
**Almost 50% of curriculum are protected for SDL

Improvement of NMLE pass rate

<table>
<thead>
<tr>
<th>Academic year</th>
<th>Type of phase III curriculum</th>
<th>NMLE pass rate</th>
<th>Ranking of SMS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Lecture</td>
<td>85.78</td>
<td>62th</td>
</tr>
<tr>
<td>2004</td>
<td>Lecture</td>
<td>87.82</td>
<td>56th</td>
</tr>
<tr>
<td>2005</td>
<td>1st PBL class</td>
<td>91.52</td>
<td>37th</td>
</tr>
<tr>
<td>2006</td>
<td>2nd PBL class</td>
<td>93.11</td>
<td>19th</td>
</tr>
</tbody>
</table>

* Ranking of SMS out of 80 medical schools in Japan

Issues we faced

- Ineffective SGD
  - Active, but superficial...
- Administrative Issue
  - Faculty’s workload must be decreased

Ineffective SGD

- Step1 was activated by introducing “Step 0”
  - Give student the first page of case in advance
- Superficial discussion
  - “Word association game” in step1
    - Active & automatic discussion disregarding mechanism and patient’s background
  - Poor presentation skill and a few question in step3
    - Unskilled tutor can not control these situation
- How can we do next?

Back to the basics

- What is PBL?
  - Case based learning
  - Small group discussion
  - Self-directed learning
  - Integrated learning basic and clinical medicine
- It is true, but not enough
  - A lesson from my scholarship days in JABSOM

1. Active tutoring

- To motivate and drive students’ learning
- Emphasize clinical reasoning
  - Find and solve clinical problem
  - Make clear “what they already know” and “what they don’t know yet”
- Tutor’s strongest weapon
  - Ask students “why” or “what does it mean”
  - Ask students to illustrate what they talk
2. To enrich PBL

- Integrate PBL with:
  - clinical skill training
  - clinical practice in primary-care setting
- Practical experience help students:
  - to image patient’s condition vividly from case scenario
  - to think as a member of virtual medical team in PBL
- Without this, PBL is just a paper simulation

New SMS curriculum (2008-)

<table>
<thead>
<tr>
<th>Year</th>
<th>1st year</th>
<th>2nd year</th>
<th>3rd year</th>
<th>4th year</th>
<th>5th year</th>
<th>6th year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic Med. overview</td>
<td>PBL</td>
<td>Clerkship</td>
<td>Elective</td>
<td></td>
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</tr>
</tbody>
</table>

- Expand PBL to 2 years
- Employed a nurse as a clinical skill trainer and program manager of primary care practice

Crisis in small medical school

- Serious shortage of man-power in Saga
  - Human resource is almost 1/5 of JABSOM
  - Most of faculties are full time clinician of medical school hospital
  - Tutoring hours a week for 4 weeks is big stress for faculties
- How can we do next
  - more effective
  - reduce faculty’s workload in PBL

It is still secret, but...

- Student tutor program (2007-)
  - Elective course for MS6
  - 20 students registered for 2008 program
- Hybrid curriculum of PBL and CBL
  - CBL: Case-based Learning
  - Floating tutor system
  - Large classroom PBL

Our “virtual OME” has been discussing and trying the new method. (JABSOM, Keio, St Luke’s and Saga)

Thank you for your attention
I wish you a successful workshop!