

Trial of a New Collaborative Education System ----Summary of a Two-year Trial of Comprehensive Seminars----

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In recent years, the period of hospitalization for patients has been decreasing, resulting from the introduction of critical path and other changes in the health care environment. In addition, the skill of workers and students must be high enough for safety. In response to such circumstances, conducting early practical training, and learning the importance of team medicine has become a major goal in education of medical-technology students. Niigata University of Health and Welfare requires that students take mandatory Freshman Seminar I in order to proceed through smooth college life (in the first semester of the first year) as a basic liberal arts subject. To facilitate better education for basic ability developments and interpersonal exchange of health and safety, a small group is formed within department and the class is operated in a small seminar room. Moreover, we are offering Freshman Seminar II (in the second semester of the first year) in order to develop the educational foundation for collaboration among professionals.

Each seminar group is formed by students from different departments in Freshman Seminar II. The purpose and content is to familiarize students with the students from different departments who will become specialists with special future goals.

By spending a period of time together with each other, they acquire basic comprehension and attitude through the process of research to solve problems after setting issues and themes, and improve their ability in basic study and interpersonal exchange which are necessary for practice collaboration and teamwork.

Integrated learning Seminar is conducted for senior students after the completion of required courses except thesis preparation. The content of Integrated Learning Seminar is to learn practical co-operation along with several expert professionals (team medicine, team care), and the seminar consists of a mixed group of students from all departments on campus. This was installed as part of curriculum in 2005 and the course work will begin in 2008. However, we conducted a trial course in 2004, because this seminar has characteristics to expand to interdepartmental group formation as students enter senior year. It will be the first time to use simulated patients on campus and to make reports about the results obtained¹⁾. In fiscal 2005, we conducted this seminar in the associated facilities and the results were reported with evaluations and suggestions to improve the seminar.

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Learning goals:

The major goal of the comprehensive seminars is to produce a smooth transition of students to the profession of “QOL supporter”, who can support, the maintain and improve the service user’s quality of life. “QOL supporter” is our university’s password since the foundation,

In order to achieve this goal, students from five departments, physical therapy, occupational therapy, speech therapy, health and nutrition and social welfare as of year 2005, will work collaborating with each other’s needs in their specialty and capability. to understand and search of the true needs of their subjects (patients) providing the specialty and activity. It is a goal that students will understand the techniques and specialty of other occupations by familiarizing the importance of collaboration through activity during the seminars. The second goal is that students will understand techniques and follow other occupations’ concepts by respecting the importance of collaboration through seminar activity. The second goal is that students will realize the necessity of close collaboration with other professions to support and improve the patients’ quality of life, and will understand the significance of regional activities to conduct those in practice.

Goals for success are the following: Being able to evaluate the subject. Being able to distinguish the difference between evaluations, based on technique and the activity, of other occupations and their own department or field. Being able to explain the results of evaluation in study conference. Being able to confer and extract the needs of the subject person(s) in conference. Being able to plan and approach based on the results of the case conference in collaboration, depending on the subject. Being able to point out the characteristics of the approach from other occupations depending on the needs of subject(s). Being able to explain the intervention/ care plan to subject(s) and to obtain consent. Being able to

consider subject’s opinion regarding the intervention/ care plan.

Promotion of contents:

In the first and trial year, the support of disabled people living in this area was the theme and an intervention of quadriplegics to the campus was conducted. In second year, an activity was undertaken with two themes at two different places, regional health promotion facility and nursing health care facility for aged persons. For theme 1, we actively invited public participation from those residents in area, and for theme 2, we conducted activities depending on people’s social back ground among facility users.

Theme 1: Preparation of community residents in health administration.

Theme 2: Support of elderly users of healthcare facilities during and after evacuation fro the healthcare facility.

The content of the theme 1 was that students prepare and conduct an indivisual program for the subject conferring with their fellow students concerning the aspects of nutrition and exercise. In theme 2, students made a decision concerning support policy for discharge from a facility after conducting professional evaluation to the subject.

Summary of problems found:

The emerging problems of such a two year trial are the following:

1. Implementation site: Both on-campus and in facility were possible lsites.
2. Students participation: Junior students from the department of physical therapy were involved but they were not finished some special courses. Three weeks of a clinical training course had been implemented. The students from other departments were in senior year. Because of a large discrepancy in students’ ability in those years, some problems were encountered in order to make effective teams.
3. Selection of theme, department and number of

Table 1. Work comprehension of occupation (before starting the course).

| Understanding of work | PT work | OT work | ST work | Dietician's | Social worker's | Total |
|-----------------------|---------|---------|---------|-------------|-----------------|-------|
| Well understood | 2 | 0 | 1 | 2 | 2 | 7 |
| Almost understood | 4 | 4 | 3 | 2 | 4 | 17 |
| Fairly understood | 5 | 8 | 8 | 5 | 6 | 32 |
| Some understood | 5 | 6 | 6 | 6 | 6 | 29 |
| Scarcely understood | 2 | 0 | 0 | 0 | 0 | 2 |

Table 2. Work comprehension of occupation (after the course).

| | PT | OT | ST | Dietician's | Social worker's | Total |
|---------------------------|----|----|----|-------------|-----------------|-------|
| Well understood by course | 6 | 6 | 7 | 9 | 7 | 35 |
| Satisfactory understood | 10 | 5 | 5 | 6 | 4 | 30 |
| No change | 1 | 6 | 6 | 1 | 7 | 21 |
| Less understood | | | | | | 0 |
| Scarcely understood | | | | | | 0 |
| No answer | 1 | 1 | | 2 | | 4 |

students involved: From the results obtained during that period, it was found that teams consisting of students from all department was not always necessary. In our method, every student was given an equal task regardless of department. However, Ogawa's report² about team practice of medical education mentions that the nursing department that conduct medical treatment, evaluation and responsibility found the students from centered around a certain department and changing their duty depending upon the department may be helpful in reaching the goal.

4. Development of simulated patients: In order to conduct training towards our goal, we need to develop and simulated patient, because the students trained on campus are likely to take responsibility on evaluation of physical function related with an operation from a certain cure from physical disability.
5. The number of teachers: As we have reported earlier, the trial collaboration of five departments was performed by five teachers, each from a different department for five

groups consisting of five students. Because of rotation, every teacher must take care of twenty five students. Furthermore, one facility employee must accompany each group, if the classes are carried out in a medical facility.

6. Schedule and hours of course: The course hours in sophomore year were over fifteen (90 minutes x 15). This is because the implementation sites were off-campus. For example, in nursing and healthcare facilities for elderly people, students conducted not only the designated measurement, but also observed the actual living environment by visiting the facility in order to understand the situation of the client, in detail. In health promoting facility, students spent their hours making practical programs, concerning exercises and feeding through counseling and monitoring. Therefore, we offer education three months by the semester system (Table 1).
7. Implementation period: Due to the premise that we offer during semester after completion of special subjects, it is understandable that we would be deeply concerned with the source

Table 3. Participation to care conference.

| | |
|---------------------------------------------|----|
| Presentation by the own case | 3 |
| Participation by attendance | 2 |
| Participation by other case with discussion | 0 |
| Participation by other case by listening | 4 |
| No participation | 9 |
| Total | 18 |

Table 4. Reasons for participation to trial course.

| | |
|------------------------|----|
| Interested in contents | 11 |
| Recommended by teacher | 8 |
| Available course | 0 |
| Other | 1 |
| Total | 20 |

Table 5. General impression of the course.

| | |
|---------------------|----|
| Excellent | 16 |
| Good | 2 |
| Undecided | 0 |
| Dull | 0 |
| Regret by attending | 0 |

composition of every department. Moreover, it would be very hard for the senior students to take this course simultaneously with clinical training (Table 2).

8. Accomplishment of purpose of the course: Before and after questionnaires (Table 3 and 4) regarding the students' understanding of the work, it is clear that the students have accomplished their goal, making effort towards collaboration by not only learning the reality of measurement and evaluation of each occupation, but also by conducting collaborative activities.

9. Theme:

(a) Considering they are undergraduate students, it is appropriate that teachers conduct evaluation and examination of simulated patients.

(b) In the case of carrying out a trial in a health promotion facility, it is necessary to co-

ordinate the education goals of our university and the facilities.

10. Other: Because most of our students have no experience in a case conference (Table 5), it is possible that teacher or facility staff work as a chairperson or a leader of the conference.

Towards actual enforcement:

Based on the problems mentioned above, it may be necessary to consider the following points as an actual enforcement.

(1) The number of students participating: If we change the class from trial with a small number of students to a large number of participating students, we must research carefully the problems such as implementation period, adjustment of teachers for class and whether the trials using simulated patients are possible or suitable. When we want many students to attend class at the same time, we must obtain personal or visual aids for teaching of the same subject. However, it is undeniably clear that direct conversation between students and teachers over simulated patients at the site is the best.

(2) Goal of study, confirmation of course contents and participating departments: The students from several departments participate in practical training and thus it is necessary to decide the combination of departments to confirm the learning goal, considering the issues of the participating departments.

(3) Limit of number of students from an individual department: Although it is an elective course, certain limitations over the number of participating students from each department must be accepted.

(4) Selection of teachers: It is necessary to appoint the teachers who direct and make decision for classes with fixed duration from the trial period to actual enforcement hours.

(5) Style of course: Because this is a course extending over all departments, it will have a similar style to intensive education. In the case

of conducting a trial in health promoting facilities, a long term measure integrated with Freshman Seminar II could be conceivable. For example, during freshman year, we recruit students for comprehensive seminar orientation and seminars, visiting a practical training facility as a part of Freshman Seminar II, and learning significance of the facility. During sophomore year, we conduct a study session once or twice on disorders where students take charge of care and evaluation exchange with other occupations. In senior year, teachers of the comprehensive seminar will meet students and conduct the actual and case conference on simulated patients as a interact or the seminar.

Moreover, we should conduct practical training on the health promotion facility intervene with clients. By maintaining the solid status of Freshman Seminar II as the primary comprehensive seminar, it becomes possible to have practical competence in making relationships earlier. In this basis, we should conduct user's evaluation earlier and take enough time for follow-up. The frequency of seminars such as interviews with clients and counseling on exercise and nutrition will be kept as present. In this way, it will be possible to see the effect over longer span to committing to clients.

Final comments:

Since 2004, we have conducted trial comprehensive seminar as a practice course to teach collaboration with othe occupations. In order to develop students to be able to play a part in team medicine, trails not only to educate everyone to be an expert in a field, butalso to learn collaboration between many occupations were carried out in the process of medical technology and occupational therapy. However, joint seminars that extend to cover three departments like Freshman Seminar I and II which are comprehensive seminars for the purpose of meam medicine and team care are

very rare in Japan¹⁾. During the two year trial, the most difficult task was that of administrating curriculum among departments, because this joint course is shared among several departments. Nevertheless, students attended the courses outside of the regular curriculum, spending much time in a busy period of four years. Many students are interested in the joint training course with other fields and attend voluntarily (Table 6). Almost all students responded with great satisfaction to the course in a course evaluation question (Table 2). They felt appreciative of a course that gave a practical training with a moderately tense and comprehensive seminar course for two years, we again recognized that it is valuable as a practical course to learn collaboration with different occupations. Even though clinical practice is complicated and social environment required a promptness regardless of holistic or modern medicine, patients require prompt and safe medical treatment. It is inevitable for undergraduates to learn the necessity of collaboration for team medicine and team care. However, there are many problems that lwe must solve for imprementation and it is necessary for us to discuss them frankly for practical application of collaboration based on our two year trial.

Refermces

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