Students’ perception of peer tutor roles in the small group discussion

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Abstract. Peer-assisted learning (PAL) is an educational strategy increasing in higher education include in medical education. There are some advantages of PAL for peer tutees and also for peer tutor. The aim of this study was to investigate perception of peer tutees and peer tutor to identify peer tutor roles in the small group discussion. There were 59 students in second-year as peer tutees and 14 students in third-year as peer tutor follow this study for 4 weeks. Peer tutors must take part in coaching and trial before facilitate of peer tutees. At the end of study, peer tutees and peer tutor were given questionnaire to assess the role of peer tutor in the small group discussion. In total 53 peer tutees (89.83%) and 14 peer tutor (100%) finished fill the questionnaire. There were 50 peer tutees (94.30%) agree that peer tutor performed well in their teacher roles and 45 peer tutees (84.90%) agree that peer tutor can serve as effective teacher. Most of peer tutees and peer tutor agree that role of peer tutor as a facilitator and assessor in the small group discussion. Peer tutees also agree that peer tutor as information provider, role model, planner and resource developer but peer tutor disagree. Facilitator and assessor are suitable roles for peer tutor. Increasing roles of peer tutors are needed to improve the ability of peer tutor to fill the expectation of peer tutees.Keyword: peer-assisted learning, peer tutor, small group discussion

1. Introduction
Peer-assisted learning (PAL) is an educational strategy to be increasing in higher education. Peer tutor can be definition as people from similar social groupings who are not professional teachers but help each other to learn and themselves from teaching. [1] PAL also called as peer tutoring, peer counselling, peer coaching, peer learning or near-peer teaching. [2] [3] Tutor has been used to denote those assisting the learning of their peers and tutee for those being assisted. [4] There are some advantages of PAL for both peer learner and teacher.[5] It alleviates faculty’s teaching burden, provide role model for junior students, enhance intrinsic motivation, enriches the learning experience of students and prepare the medical students for their learning future as educators.[2] Other study found that teaching junior students can have a positive effect on facilitating and communication skill for the peer tutor. [3] The benefit for the tutee is improved level of self-confidence and aptitude. [2] Effectiveness of PAL has been demonstrated for practical courses in gross anatomy, problem-based learning groups, communication skill training, clinical examination courses and resuscitation training.[6] PAL allows senior students to assist their junior colleagues with teaching and learning support and is implemented in many undergraduate and postgraduate. [7] The other hand, there were disadvantages of PAL such as, peer tutor difficult to keep peer tutees focus or re-teaching of subject because they are
of similar age. Some peer tutees do not respond well to group teaching and others fell only well qualified person can convey the necessary knowledge [2]. Freret et al. recommended that implementation students-as-teacher into three domain pre-implementation, implementation and post-implementation. [8] The congruence theory argues that PAL have better understanding of the fund knowledge, to include shortcoming of knowledge, of their junior colleagues. Social congruence is also importance factor that may influence group functioning and students’ way learning. [3] Small group discussion is learning situation that identic as student-centred learning which facilitate with tutor. The role of tutor is motivate the students and facilitator instead of the lecturer. The study by Bulte et al. shows that peer tutor has role as information provider, role model and facilitator. [3] Faculty of Medicine and Health Sciences, Universitas Warmadewa has peer-assisted learning program since 2012. It’s begin when this study held. This study investigates the perception of peer tutees and peer tutor to identify the peer tutor roles in the small group discussion.

2. Methods
There are 59 second-year medical students had followed this study as a peer tutee. These are consist 32 males and 27 females. These students were currently undergoing a Block Respiratory System and Disorders. The peer-tutor was the third-year medical student who recruited and coached. There were 14 students who fill the requisite and agree as peer tutors. These are consist 8 males and 6 females. Prerequisites as peer tutor are first taker in Block Respiratory System and Disorders, graduate point average >3.00, agree as peer tutor and can follow coaching and trial PAL programme before teaching peer tutees in Block Respiratory System and Disorders. Instrument adopted from Bulte et al. research. They developed survey questionnaire based on the role of teacher described by Harden and Crosby. It consist six area roles; information provider, role model, facilitator, assessor, planner, and resource developer. [3] Peer tutees and peer tutors were fill out each item with five point Likert scale from “strongly disagree” to “strongly agree”. There are two item that peer tutees will be fill, but not for the peer-tutor. These items are about general students’ perception implementation of PAL.

The Block Respiratory System and Disorders has 4 credits in fourth semester. At the first, Block Team developed the concept of PAL embedded learning situation in Block Respiratory System and Disorders. Block Team recruit peer tutor by prerequisites and offer that student has has that prerequisites. The student who agree to follow this study will have been coaching and try out before facilitate the junior students. There are five times of PAL in this block. Each activity of PAL lasts for one hour. Every activity of PAL, there is briefing from Block Team to has same perception of peer-tutor. The last PAL activity, peer-tutees and peer-tutor will fill out the questionnaire. Each peer-tutor facilitate one small group discussion that consist 9 till 10 peer tutees. Data are presented as means of each item. Peer-tutees and peer-tutor perception are tabulated in the same table. Each item are presented as percentage

3. Results
The questionnaire was administered to all second-year medical student [n=59]. There are 53 student full fill the questionnaire [response rate: 89.83%]. All peer-tutors finished the questionnaire at the end of PAL activity. General students’ perception of PAL shows in figure 1 and figure 2.
Figure 1. Students’ perception about peer-tutor performance well in teacher roles

Figure 1. Shows 50 peer tutees [81.1%] agree and [13.2%] strongly agree that peer tutor performed well in their teacher roles. There is no tutee agree that peer tutor performed bad in their teacher roles.

Figure 2. Students’ perception about effectiveness of peer-tutor as a teacher

Figure 2 shows that majority of peer tutees [45 peer tutees] agree and strongly agree that peer tutors can serve as effective teachers. There is no peer tutee agree that peer tutor ineffective. Table 1 shows comparison between view of peer tutees and peer tutor about peer tutor roles. The majority peer tutees agree that peer tutor have all role of teacher. It is different than peer tutees, peer tutor agree and strongly agree that role of peer tutor as a facilitator. As assessor, most of peer tutor agree but almost half of them are still hesitant.

Table 1. Students’ perception of peer-tutor roles: view of peer-tutees and peer-tutors

| Peer-tutor Roles          | Peer-tutees [n=53] Total [%] | Peer-tutors [n=14] Total [%] |
|---------------------------|-------------------------------|-------------------------------|
|                           | 1    | 2    | 3    | 4    | 5    | 1    | 2    | 3    | 4    | 5    |
| Information provider      | 0    | 3    | 7    | 41   | 2    | 0    | 3    | 8    | 2    | 1    |
| Role model                | 0    | 0    | 12   | 36   | 5    | 0    | 2    | 9    | 3    | 0    |
| Facilitator               | 0    | 0    | 7    | 39   | 7    | 0    | 0    | 0    | 3    | 11   |
| Assessor                  | 0    | 1    | 9    | 39   | 4    | 0    | 1    | 5    | 5    | 3    |
| Planner                   | 0    | 1    | 14   | 34   | 4    | 1    | 6    | 6    | 1    | 0    |
| Resource developer        | 0    | 1    | 9    | 37   | 6    | 2    | 6    | 4    | 2    | 0    |

1: strongly disagree, 2: disagree, 3: neutral, 4: agree, 5: strongly disagree
Another role, most of peer tutor are hesitant about their role in small group discussion. Peer tutor are most hesitant with their role as role model. Peer tutors are not hesitant that their role as information provider. Most peer tutor disagree that their roles as planner and resource developer.

4. Discussion
This research shows that peer tutees’ perception have good response to PAL program. This is mean that peer tutors have good performance and can serve effective as teacher. PAL program is effective and successful technical skills lab trainer as experienced faculty staff.[6] Other study that evaluation of differences between PAL group and staff-led group show that theoretical and practical of tutees outcomes showed no difference between two group.[9] Research conducted by Tayler et al shows near-peer teacher were perceived as significantly more approachable than consultant tutor, more aware of learning outcomes and more receptive to student input. [10] Medical students can contribute significantly to the design and delivery of undergraduate medical program above and beyond the simple delivery of peer-assisted learning. Their participation in all stages enables them to feel involved in course development and education of their peers and ultimately leads to an increase in student satisfaction.[11] Students can contribute to a medical school in a number of domain such as teaching and learning, resource development, research and evaluation, mentoring and support, peer-assessment. Medical school should offer students the opportunity to contribute to their course at very appropriate opportunity. [11]

There is difference between peer tutor and peer tutees’ perception about roles of peer tutor in the small group discussion. Peer tutees’ perception show that should have all roles of as a teacher but peer tutors’ perception show that only facilitator and assessor that roles of peer tutor. Other study show peer tutees’ perception were significantly higher than peer tutor perception in small group teaching and facilitating skill, teaching history-taking skills and teaching physical examination skills. [12] Information provider, role model, facilitator to be appropriate roles for near-peer teacher from near-peer learner and teacher.[3] Both peer tutors and peer tutees have benefit in peer-assisted learning and it suitable implication for medical education. [12] Research conducted by Burgess et al shows that peer tutor valued the opportunity to practice and improve their medical knowledge and teaching skill. Peer tutee valued the opportunity for additional practice and patient interaction, within relaxed, small group learning environment.[13] Other research shows that junior student feeling more prepared to integrated to health care team and develop a clerkship study plan after 6 month near-peer-small-group seminar.[14]

PAL activities enhance the abilities of students and community health worker to learn from experience and to achieve the goal of critical reflection and experiential learning.[15] Junior medical students are not put a disadvantages when being tutors by senior medical students. It appears that near-peer tutor has at least similar benefit as faculty tutoring.[16]Tutees found that PAL program to be valuable in learning and revision, establishing at community and gaining practical skill and advice through a small group format.[17]Peer are able to provide reliable and valid information about students’ active participation tutorial group.[18] Small group have directed positive effect on students’ motivation of learn, while peer interaction provide encouragement and act as support network that positively influence students’ development.[19] Final-year graduate-entry students are capable of organizing a high-quality PAL program to teach clinical examination. [20] Peer tutors who had same year with peer tutees show better performance in the subject they taught.[21]

The limitation this study was that PAL conducted in the small group in one institution. There are some bias that make peer tutors’ perception choose facilitator and assessor as a role of peer tutor. One of them is peer tutor just facilitating and assess learn of peer tutees. Research of PAL still needed to make better teaching and learning in medical education.

5. Conclusion
Students’ perception of peer tutor roles in small group discussion is as facilitator and assessor. Role of peer tutor as information provider, role model, planner and resource developer but peer tutor disagree.
Facilitator and assessor are suitable roles for peer tutor. Increasing roles of peer tutors are needed to improve the ability of peer tutor to fill the expectation of peer tutees

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