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Role Playing Method Decreases Communication Anxiety of Medical Students

Ni Made Swasti Wulanyani, I Made Sudarmaja and Dewa Ayu Agus Laksemi
Medical Faculty of Udayana University
Denpasar
e-mail: swastiwulan@yahoo.com

Edwin Adrianta Surijah
Faculty of Psychology
University of Surabaya
e-mail: edwin@adrianta.com

Abstract. As a professional in public health services, a physician should be acquainted with communication skills when interacting with all kinds of human character. An effective communication could be implemented to collect information as a prerequisite to make an accurate diagnosis and satisfy the patient as well. Anxiety haunting inexperienced students in facing real patients could block one's real communication potential. The aim of this study was to assess whether the role playing method could decrease the anxiety scale of the subjects. Subjects (N = 70) were first semester medical students. The Communication Anxiety Scale were delivered before and after they conduct the role play. Data were analysed with *t test.* Results show a significant decline in anxiety scale ($p < 0.001$). The role playing method is able to decrease communication anxiety through simulation (training in a near-real situation, stimulating imagination and verbal potentials).

Key words: role playing, anxiety, medical student

Abstrak. Sebagai profesional dalam bidang layanan kesehatan masyarakat, seorang dokter dituntut memiliki keterampilan komunikasi saat berhadapan dengan karakter manusia yang beragam. Komunikasi efektif dapat digunakan untuk menggali informasi demi tertegakkannya diagnosis yang akurat dan juga memuaskan pasien. Kecemasan yang timbul pada para mahasiswa yang belum berpengalaman dapat menghambat kemampuan komunikasi yang sesungguhnya. Tujuan studi ini adalah menilai apakah metode bermain peran dapat menurunkan tingkat kecemasan para subjek. Subjek (N = 70) adalah mahasiswa semester 1 fakultas kedokteran. Skala Kecemasan Komunikasi disajikan sebelum dan setelah subjek melakukan permainan peran. Data dianalisis dengan *t test*. Hasil menunjukkan bahwa tingkat kecemasan menurun secara signifikan ($p < 0.001$). Metode bermain peran telah berhasil menurunkan tingkat kecemasan komunikasi karena memberikan kesempatan berlatih dalam situasi yang mendekati kenyataan, merangsang imajinasi dan kemampuan verbal

Kata-kata kunci: bermain peran, kecemasan, mahasiswa kedokteran

Mastery of basic communication skills enables a person to communicate with other persons effectively. If a person is able to communicate effectively, it also means that he/she will be able to interact with others well (Wardani, 2001).

Recently many schools of medicine have realized the importance of providing a course of communication in their medical educational programs. The ability to communicate effectively is not only needed after the students have graduated and become doctors, but it is also important in many activities during their studies such as when doing a survey, social work, community education or campaign etc. A doctor must master and apply the skill of making effective communication with his/her patient and this skill cannot be delegated to any other person to do it. By building effective communication with a patient, a doctor can obtain sufficient information from a patient necessary for establishing a correct diagnosis of the patient's problem, besides giving satisfaction to both the doctor and patient.

It is common that a person tends to become somewhat stressful when doing a new assignment for the first time, including communicating with

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Correspondence concerning this article should be addressed to Ni Made Swasti Wulanyani, M.D., Faculty of Medicine Udayana University, Jl. P.B. Sudirman, Denpasar 80232. e-mail: swastiwulan@yahoo.com

people. The main cause underlying this stress is fear of making mistakes. In a certain level, stress or apprehension may be beneficial in a sense that it can motivate a person to act, or in this case, to communicate well. However, if the stress is too much for a person to cope with, it can hinder one's ability to communicate or break down his overall performance. Thus it is important to find ways to reduce the level of the stress in one individual.

One of the methods used to reduce stress is the technique of role-playing. With role-playing, students can practice repeatedly on how to apply the principles of effective communication. Role-playing is set in a simulated situation made near to reality, so the students may reach the level of "being natural". This method is meant to make students less stressful in making communication and they are hoped to be ready to cope with a real situation. This method also provides opportunity for the students to develop their empathy for other people they communicate with who may become stressful in the interaction. Any feedback given by the facilitator or other fellow students after the role-play can increase the understanding of one's self and mastery of communication technique, so the students can become more confident and less stressful. Therefore, it is necessary to assess scientifically the effect of role-playing on the level of stress caused by communication among medical students of Udayana University.

Communication

Communication is a part of interaction or factors making the interaction between individuals. In communication, one imparts a message while the other counterpart receives the message. Communication comprises several types: communication between two individuals, between an individual and a mass, and between a group of individuals and a mass (de Vito, 1997). In a communication between two individuals, there is a two-way interaction of messages. By means of the messages, a mutual understanding of the meaning of the messages develops. What is most important is not the message it self, but the meaning of the message (Sarwono, 2002). According to Lesmana (2005), the indicator for the understanding of meaning of message is the existence of satisfaction and mutual understanding in both parties doing the communication.

One of the main features of effective communication is application of active listening. Active listening in a communication is reflected in the forms of repeating the main ideas of the other counterpart's message, showing understanding of the other person's feeling, showing encouragement, and probing the meaning of what the other person has said. All the above features of active listening needs a certain skill not only in the aspect of composing appropriate words or sentences arrangement, but also in the aspect of voice intonation or expression in the communication. For example, such expression like: "Oh yeah, …uhmm…, so …, then…?" may have different meanings if spoken in different voice intonations. Under-standing of this aspect can greatly influence the process of communication including counselling, which is a common measure in medicine (Lesmana, 2005). According to de Vito (1997) and Gregersen (2007), another important factor in communication is to understand body-languages/ non-verbal cues. It states that non-verbal cues may be even more important for understanding the message in a communication than the verbal cues. It's also important to note that a communicative ability must be beyond linguistic context through non-verbal cues (Olson, 1999). In conclusion, we could say that verbal and non-verbal communications are inseparable.

Role-play

Role-play is a method of teaching-learning process in which the students act according to scenario (Amin & Eng, 2003). This is an interactive technique that can enhance students to act as if in a real situation. According to Lucas (as cited in Amin & Eng, 2003), role-play can improve the participant's overview on the communication such as by asking questions, giving feedbacks, and tracing a certain problem.

Many researchers believe that role-play method is more effective particularly in teaching communication skill than using standard teaching techniques. Role-play method brings greater advantages for increasing student's communication skill than lecture method which doesn't require students to be active in class. It's because role-play method allow stu-

dents to participate directly, embed the concept, feel the experience, and thus store more effectively in long term memory (Alden, 1999).

Brierly, Devonshire, and Hillman said that role-play method develops three functioning knowledge (2002). Through role-play method students are guided to know about the theory of communication skill (propotional knowledge). They are also induced to know how to communicate (procedural knowledge). At last, students will also be able to know when/the circumstances to use the skills (conditional knowledge).

Anxiety

Students, in their daily life, may get certain forms of stress or anxiety such as those related to personal problems, study burdens, physical and social environment. According to Kaplan and Sadock (as cited in Fausiah & Widury, 2005), a little level of anxiety can function as motivator to improve one's performance and to anticipate things that may be harmful. On the other hand, extreme anxiety can be a stumbling block in which one individual is not able to communicate well. There are examples of a situation in which due to excessive anxiety, a student cannot answer plainly easy questions in an examination. Treatment of an anxiety is given in accordance with the level of the anxiety. The treatment methods include desensitisation training and hypnotherapy (Kasandra, 2003; Slamet & Markam, 2005).

Anxiety in this research is pointing to social related anxiety. People who have this kind of anxiety is getting excessive fear in social situation in which the person believes he/she will do something embarassing (Book & Randall, 2002). This research focus on the anxiety experienced by the medical students. The social situations which stimulate anxiety are met by the doctors or medical students through their interactions with the patients. The fear of doing something wrong in front of the patient may cause anxiety.

It's believed that role playing method, coping skills training, and exposure to the social situations may decrease anxiety. These approaches are based on cognitive behavioral therapy. There is also another approach using pharmacotherapy (SRRI and benzodiazepines) (Book & Randall, 2002). Cognitive behavioral based approach including role play method and coping skill training are chosen. It's because this approach may have long term benefit for the medical students and directly intervening the root of the problem. The medical students will learn and improve their communication skill so they could reduce the anxiety itself. Also, this approach is not only developing their communication skill for specific doctor-patient relationship but also for many other life aspects which require communication skill.

Method

Subjects. There were 100 subjects participating in the pre-test phase and 80 subjects in the post-test phase. The subjects were first semester medical students following the communication topic lecture.

Instrument. Level of anxiety in communication was measured by Anxiety in Communication Scale, design by Mariani with reliability coefficient 0.961 (Azwar, 1999). The scale based on Burgoon & Ruffner 's theory of anxiety in communication, consisting three aspects: unwillingness, avoiding, and control which are showed in Table 1.

Due to the form of the scale, there might be some limitations such as the anonymity. We decided not to ask subject's profile to encourage them to return the form (scale). It's based on our prior study that most students were unwilling to participate if they have to write down their identity.

Procedure. Originally, the design used for the study was intended to be a "one-group pre-test–post-test design" (Suryabrata, 2000). At the beginning of the Communication topic, the students were asked to fill in a questionnaire on Communication Anxiety Scales as the pre-test. After given an introductory lecture, the students were asked to work in pairs in a small group discussion consisting 10 students. One student was assigned to act as the doctor or counsellor and another student as the patient or counselee, based on the scenario (already prepared by the planner team of the topic). The time provided for each role-play was around 10 minutes. The task of the other non-playing students and facilitator was to follow the role-play carefully and make com-

Table 1
Distribution of Aspects in Scale

Aspects	Number
Unwillingness	F 1,2,3,5,10,11,12,13,14,15,16
	NF 4,6,7,8,9,17,18,19,20
Avoiding	F 21,22,23,24,25,26,27,31,32,33,34,35,36,37
	NF 28,29,30,38,39,40
Control	F 41,42,43,44,45,46,47,48,49,50,51,52,53
	NF 54,55,56,57,58,59,60

F : Favorable
NF: Non-favorable

ments after each role-play was finished. The act was repeated by the other pairs of students, so all would have their turn to do the role-play and act as doctor or patient. The next day, they did the same role play. At the end, the students were asked again to fill in the above Communication Anxiety Scales form as the post-test.

Analysis. To evaluate the program outcome, analysis of data was done by comparing data on Communication Anxiety Scales before and after application of the role-play method. As we mentioned before, there is limitation due to the anonymity of the scales filled. Thus we compare the data using independent sample t-test rather than paired-sample t-test. The analysis of data was carried out using SPSS 13, with a confidence interval = 95%.

Results and Discussion

Of the 100 questionnaire forms distributed before role-play (pre-test), all forms were filled in and returned. Of 100 forms distributed after role-play (post-test), 80 forms were filled in and returned. Twenty subjects did not returned the forms. We selected randomly 70 scale returned from each phase then compared the results.

Results of the data analysis using statistical comparison show an average score obtained in the pre-test, i.e. 3.360, which actually was within acceptable level (the highest level of stress was 5). This means that the students before role-play sessions were in a medium level of communication anxiety. After role-play sessions were done in the teaching-learning process, the level of anxiety was reduced to the average score of 2.129. Normality test using One Sample Kolmogorov-Smirnov Test showed that both data (pre/post) were distributed normally (Kolmogorov-Smirnov z score for pre-test data = 1.241; p = 0.092 and z score for post-test data = 0.995; p = 0.275). Homogeneity test found that the two groups were homogeneous (F = 1.069; p = 0.303). The *t-test* resulted t = 21.413; p = 0.000, which means that there is a significant difference of the level of anxiety before and after role-play sessions. This result indicates that role-playing could be maintained in the teaching-learning activities, especially for developing skills that require sound psychological condition.

The questionnaire covered three aspects, first, *unwillingness* of participants to take part in any of the communication sessions; second, *avoiding* taking part in order to keep away from unpleasant experience in communication, as indicated by insufficient recognition of the situation of the communication, which lowered their intimacy and empathy; third, *control*, showing the low level of control on the communication due to environment, deficiency in adapting to other people's reaction during communication. Table 2 shows that of the three aspects, the level of anxiety related to the *control aspect* proved to be the highest. After the role-play sessions, the greatest reduction in the level of stress was found in the aspect of *unwillingness.*

The medical profession requires good skills of communication, hence it was decided that the subject concerning basic principles of communication, and more specifically the communication between doctor-patient, be maintained in the curriculum. Generally, communication was not new for the students, as they were adults having sufficient experience in communication with other people. However, some obstacles in communication still exists amongst the students, especially when confronting

Table 2
Comparison of Three Aspects

Aspects	Mean	Mean Diff.	*F*	*t*	Sig (2 tailed)
Unwillingness					
Pre	3.4385				
		1.4545	18.166	19.771	0.000
Post	1.9840				
Avoiding					
Pre	3.3040				
		1.220	2.483	8.346	0.000
Post	2.0840				
Control					
Pre	3.5580				
		1.283	4.189	8.593	0.000
Post	2.2750				

stress or anxiety.

Anxiety of acceptable level is actually normal in life as it can drive an individual to anticipate things and start to work with good results. However, if the level of anxiety is excessive, it may cause many disadvantages and harm to an individual. Anxiety may have several complex underlying causes and, strange enough, it can take its form from fear of the causes themselves.

One common way of avoiding anxiety is by avoiding the anticipated cause of anxiety. This way seems to be the easiest way to follow, but this may not solve the actual problem completely because one may come across again with similar things or situation at another time. In this case, role-play method has proved to be effective in reducing anxiety in students by exercising it repeatedly in a simulated situation that is near to reality.

Other than the above advantage, role-play has also proved to be able to generate students' imagination and verbal capacity. Students could choose the figure they like such as the doctor and develop their questioning ability to probe for more information. The other advantage is that role-playing can improve the students' sense of being empathic to other people. This is important for the future medical career of the students, in which they will have to interact with real patients and families with their varied problems, colleagues with different typologies and problems, working in a team, and following a social life. Role-playing can help students explore their own potentials through communication.

Limitations. In spite of our efforts to preconditionned the students before the experiment, this study still has some limitations. As mentioned previously, the sources of anxiety may be complex. Regarding this, it is realised that the subjects were in a diverse dynamic psychological status that could not be controlled completely. During the study, some students might happen to be in such a low psychological condition that might increase their anxiety much greater than in their usual daily life.

Conclusions and Recommendations

Conclusion. Role-playing method is adequately effective for training the students' communication ability and lowering their anxiety. Role-playing method encourages students to develop their imagination, to explore and sharpen their empathy to others.

Recommendations. Subjects that emphasize on skill and psychological soundness should use role-play method as its teaching strategy. Further studies on role-play method and anxiety or stress in students should be carried out

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Lampiran

Communication Anxiety Scale
(Skala Kecemasan Komunikasi)

Petunjuk Pengisian :

Bacalah setiap pernyataan di bawah ini dengan seksama kemudian berikan jawaban saudara pada lembar jawaban bagi setiap pernyataan tersebut dengan cara menyilang.

SS	apabila pernyataan tersebut *Sangat Sesuai* dengan keadaan yang saudara rasakan.
S	apabila pernyataan tersebut *Sesuai* dengan keadaan yang saudara rasakan.
TB	apabila saudara *Tidak Bisa Menentukan Dengan Pasti*
KS	apabila pernyataan tersebut *kurang Sesuai* dengan keadaan yang saudara rasakan.
TS	apabila pernyataan tersebut *Tidak Sesuai* dengan keadaan yang saudara rasakan.

Saya merasa cemas ketika giliran saya untuk berbicara semakin dekat.

1. Jantung saya berdetak keras saat saya mulai berbicara.
2. Muka saya menjadi pucat ketika di depan banyak orang.
3. Setiap situasi pembicaraan tidak akan membuat saya menjadi berdebar-debar.
4. Pembicaraan saya menjadi berloncat-loncat, tidak seperti yang sudah saya siapkan sebelumnya, ketika semua perhatian tertuju ke arah saya.
5. Saya merasa santai dan rileks dalam mengutarakan pendapat-pendapat saya.
6. Saya dapat menanggapi setiap pembicaraan dengan santai sehingga terjalin pembicaraan yang menyenangkan.
7. Saya suka jika diberi banyak kesempatan bicara.
8. Saya dapat mengarahkan pembicaraan seperti yang saya inginkan.
9. Saya tidak dapat mengekspresikan tubuh dan suara saya.
10. Saya takut angkat bicara dalam suatu suasana percakapan.
11. Saya merasa tertekan ketika harus ikut suasana percakapan.
12. Saya sulit untuk meyakinkan pendapat saya kepada orang lain.
13. Saya merasa gugup karena harus ikut berpartisipasi dalam diskusi kelompok.
14. Berbicara dengan orang lain hanya akan menimbulkan masalah.
15. Banyak orang sering tidak melibatkan saya dalam percakapan mereka.
16. Teman-teman sering memberi kesempatan padaku untuk berbicara di hadapan umum.
17. Saya lebih suka menggunakan waktu untuk terlibat pembicaraan daripada berdiam diri.
18. Saya sering dapat menciptakan suatu perbincangan yang menyenangkan.
19. Saya menyukai percakapan-percakapan yang ada pada acara-acara TV.
20. Saya merasa tertekan ketika saya melihat kata “diskusi” pada kuliah, saat saya sedang belajar.
21. Jika mungkin, saya selalu menghindari pembicaraan di depan umum.
22. Dalam suatu diskusi saya sering merasa cemas, sehingga saya sering mengurungkan niat untuk berbicara.

Berlanjut ke hlm. 324

Lanjutan dari hlm. 323

23. Berdiam diri merupakan salah satu cara untuk menghindari perselisihan.
24. Lebih baik saya tidak datang dalam acara diskusi toh saya tidak berani mengemukakan pendapat.
25. Lebih baik saya mengatakan "setuju" daripada harus banyak bicara.
26. Saya lebih suka ditugaskan menjadi "penulis" daripada menjadi ketua dalam diskusi kelompok.
27. Ditunjuk menjadi pembawa acara merupakan kesempatan yang saya nantikan.
28. Saya berbicara secara terinci dan jelas.
29. Dalam berbicara, saya berani menatap lawan bicara saya.
30. Saya lebih suka berbicara lewat telepon daripada berhadapan langsung.
31. Berbicara dengan orang yang mempunyai posisi "atas" menyebabkan saya menjadi takut dan tertekan.
32. Saya sering merasa takut untuk berbicara dengan orang yang jauh lebih tua daripada saya.
33. Selama berbicara saya mengalami perasaan hampa yang muncul dari diri saya.
34. Ketika saya mendengarkan pembicaraan orang lain, saya sering kehilangan konsentrasi sehingga ada beberapa kata atau pokok pikiran yang terselip.
35. Saya merasa ragu apakah saya dapat mengembangkan pembicaraan setelah berhadapan dengan orang lain.
36. Saya menjadi berdebar-debar berbicara dengan seseorang karena saya belum pernah bertemu sebelumnya.
37. Saya selalu mendengarkan pembicaraan orang dengan penuh perhatian.
38. Saya merasa yakin bahwa saya dapat mengembangkan pembicaraan saya setelah berhadapan dengan hadirin.
39. Ketika saya berbicara, saya merasa dapat mencapai tujuan pembicaraan kita.
40. Meskipun saya dapat berbicara lancar dengan teman-teman, saya merasa kehilangan kata-kata ketika berbicara di depan mimbar.
41. Saya hanya ngobrol dengan teman-teman dekat saja.
42. Pembicaraan tatap muka di suatu tempat yang masih asing buat saya, akan menjadikan jantung berdebar-debar.
43. Saya tetap dapat berbicara dengan lancar dimana saja, baik berhadapan dengan satu orang atau lebih.
44. Ruangan itu bersifat formal, namun pembicaraan yang berlangsung tetap membuat saya merasa santai.
45. Lampu yang menyorot wajahku tidak membuat saya kehilangan arah pembicaraan.
46. Saya sering merasa sulit untuk mengerti isi pembicaraan orang lain.
47. Orang lain nampaknya tidak pernah memahami apa yang saya utarakan.
48. Saya kurang peduli dengan apa yang dipikirkan orang lain tentang pendapat-pendapat saya.
49. Cara saya merespon orang lain nampaknya dapat memberikan keberanian pada orang untuk berbicara secara terbuka dan jujur.
50. Saya merasa takut dan tertekan ketika saya berbicara pada sekelompok orang yang bermacam-macam.
51. Setiap orang tertarik pada suatu topik yang berbeda-beda, tetapi saya tidak merasa cemas menghadapi mereka.
52. Setelah berbincang-bincang beberapa saat, saya segera mudah untuk menduga tingkah laku apa yang muncul dari orang-orang di sekelilingku.
53. Saya merasa sangat lancar ketika berbicara dengan seseorang meskipun saya belum kenal sebelumnya.
54. Saya menjadi merasa dipojokkan ketika banyak pertanyaan muncul saat saya menerangkan sesuatu.
55. Komentar dari hadirin akan membuat saya menjadi gugup dan cemas.
56. Bila hadirin tampak tidak tertarik dengan pembicaraan saya, maka saya akan merasa sangat tidak berarti lagi.
57. Saya akan menjawab pertanyaan-pertanyaan atau memberikan keterangan-keterangan yang diperlukan dengan penuh keyakinan.
58. Saya akan selalu mencoba mengerti sifat masing-masing individu yang saya ajak bicara.
59. Komentar yang bagaimanapun dari hadirin tidak akan membuat saya menjadi gugup.