Review

Communication skills training: Adapting to the trends and moving forward

Ye Liu¹, Yiqin Huang², Hong Gao³, Xunjia Cheng^{1,*}

¹School of Basic Medical Sciences, Fudan University, Shanghai, China;

² Huadong Hospital, Fudan University, Shanghai, China;

³ Zhongshan Hospital, Fudan University, Shanghai, China.

Summary Communication ability is one of the core requirements of doctors' competency. Teaching communication to medical students and junior doctors has attracted much attention. With the challenge of escalating demands, the status of training communication skills has been promoted in the past several decades. The training content was integrated with other courses and various pedagogic approaches have been applied and proved to be effective. Practical strategies and mixed types were highly recommended. However, there are still many problems, including the fragmentation of the training, insufficient practice, inadequate qualified teachers, case adaptation, course localization and impediment from the environment. This paper proposes some suggestions to solve the problems.

Keywords: Communication skills, medical education, doctor-patient relationship, curriculum integration

future mission

communication education.

1. Introduction

Communication ability is one of the core requirements of doctors' competency in various countries and regions all over the world (1). It is also one of the primary fields for medical ethics and medical humanities (2). Enhancing medical communication is key to achieve high-quality health care (3). With regard to the upgrading of tensions between doctors and patients all over the world, especially in some developing countries, improving doctor-patient communication is becoming a pressing matter of the moment (4,5).

Teaching communication to medical students and junior doctors has attracted much attention. How to make the learners achieve a high level of knowledge, attitude and skills of communication in order to better meet current medical needs, is worthy of thinking, research and practice (6). The purpose of this paper is to clarify the current state of medical communication

*Address correspondence to:

"Doctor" was once an appellation with halo. Asklepios, the ancient mythical god of medicine, and Chinese legendary ancient empire, Shennong, who was said to

and communication teaching, and also to propose some suggestions for the future development of

2. Doctor-patient relationship: changing times and

taste hundreds of herbs to test the medical effects, both represented the image of divinity, authority and power. Since the Middle Ages of Europe, with the introspection and criticism of the past view on medical philosophy and the mechanism of diseases, the prototype of modern medicine was gradually founded (7). Over the past hundreds of years, advanced science and technology provided insights into the nature of human diseases. Effective and safe drugs were developed and treatment experience was accumulated. Consequently, more and more previously untreatable diseases could be treated or even cured. As a matter of course, doctors were to be admired and appreciated due to their life-saving duties.

However, the truth is not that simple. Due to the rapid development of medicine, medical expenses have increased significantly; and the application of information technology provided convenient tools

Released online in J-STAGE as advance publication April 29, 2017.

Dr. Xunjia Cheng, School of Basic Medical Sciences, Fudan University, Shanghai, China. NO.138, Yixueyuan Rd., Xuhui District, Shanghai 200032, China. E-mail: xjcheng@shmu.edu.cn

for the general public to access medical professional knowledge. As a result, the contradiction between the growth of demands and the relative shortage of medical resources has become increasingly prominent (8). The healthcare system is expected to provide a high quality of professionals and services (9, 10). Unfortunately, doctors are facing much more pressure while the reputation of medical professionalism is not as good as previously seen. It takes more effort for the doctor to gain trust from the patient. The noble professions fall into the secular world unexpectedly, accompanied with escalating demands of communication.

Lewis Thomas (1913-1993), a distinguished physician, medical scientist and medical educator in the United States, wrote the book entitled "The Youngest Science". Medicine deserved the name of "The Youngest Science", accompanied by rapid alterations in its educational philosophy and theories. Experiencing the shift from the first generation of discipline-bound curriculum to the second generation of disciplinary integrated curriculum and problem-based learning, the global medical education was brought to take the third generation of reform, competency-based education (11). Every generation is a radical change, ripping the old system while establishing a new one. Currently, competency based education has become a standard for health professional talent training (12). Many organizations, including AAMC (American Medical Colleges), GMC (General Medical Council), RCPSC (Royal College of Physicians and Surgeons of Canada), LCME (Liaison Committee on Medical Education) and European Definition of General Practice/Family Medicine outlined communication skills as an essential competency and one of the vital constituents of the medical curriculum. As a matter of fact, the education of medical communication has been entering into the mainstream of the curriculum in many medical schools and is achieving more concern and a positive attitude toward its core value, reflecting a growing trend that could hardly be ignored (13).

3. Upgraded communication education

The theory and implementation of communication education at medical schools have been developed for over forty years. During its improvement various teaching patterns and teaching methods have been applied, and its educational significance has been recognized by more and more educators.

3.1. Promoted status and integration

At many medical schools, communication used to be bound to the course of medical ethics or slightly involved in medical psychology (14). Perhaps it was provided simply as an optional course or program, implying its dispensable and awkward status. It may show up as an isolated course separated from other courses, standing alone and self-sufficient. It may be provided only in the early stage of the educational plan and disappeared thoroughly subsequently, since it was believed that the students could get the best training automatically when they enter into the clinical setting with a real environment and patients (15). However, more and more medical educators realize that what we have done as mentioned above are not enough to meet the demands of fostering qualified doctors.

Nowadays, more and more medical schools have been concerned with the issue of conducting communication skills courses. Relevant programs were developed, thus increasing the course numbers and the proportion of total credit hours for the curriculum. In addition, communication skills training was integrated into the framework of other courses. The most common model for integration is to combine with the teaching of history taking and the training of clinical practical skills (16). Although the combination courses usually do not include "communication" as its course name (such as "Doctoring", "the Art of Interview"), the teaching processes present scenarios suited for training communication skills and the teaching objectives target the aims of acquisition of correct knowledge, skills and attitudes of communication. Obviously, communication skills could be taught along with all the activities of doctor-patient interaction (17). Moreover, such integration models are more effective and believed to bring more feelings of self-efficacy than the stand-alone courses in the past (18).

3.2. Various forms and approaches

There are many pedagogical patterns applied in medical communication skills training, such as moral education, accumulation of apprenticeship experience, didactic lectures, skill practice and utilization of informed handbooks, *etc.* Since the education of communication was based on skill acquisition, reflecting the intrinsic value of ethics and medical professionalism by means of practice and application, it should be learner centered and conducted based on skill practice. This has been proved to be highly effective.

Traditional didactic lecture are suitable to give outlines and make a brief introduction concerning the concepts and fundamental principles. Other forms using case based learning and practice have the superiority of facilitating the process of internalization, thus reinforcing the training effects. By organizing group discussion, using role-playing, simulated patient/ standardized patient (SP) or virtual patients, as well as a variety of simulations or real environments and real patients, the training courses have proved to help students be familiar with the process, strengthen skills, and develop mature strategies to deal with difficulties (19,20). Additionally, formative assessment is carried out in the teaching process. Prompt feedback of students' performance based on practice can help them adjust and improve their behavior and consolidate their achievements. With regard to summative assessment, educators prefer to use self-developed questionnaire, OSCE, SP-based evaluation and some instruments such as SEGUE framework, PCAS, CPCI, PPOS scales, *etc* (21-24). They were proved to be high in reliability and validity.

3.3. Booming research

The training of medical communication skills has been carried out for years, fostering a great deal of relevant research, including studies of effectiveness, evaluations of programs and courses, teaching approaches, assessment of learners, *etc.* (25). Annually increasing paper work reflects the growth of interest and achievements in this area. PubMED data showed that the number of articles titled "communication skills" steadily increased during the period from 1997 to 2016, suggesting communication skills have been getting more and more attention (Figure 1). Evidence based research provided guidelines for teaching design and program improvement, also giving some clues to developmental direction.

4. Problems and solutions

As educators, we are goal oriented and sincerely hope that we can find the best ways to improve communication, thus leading to better clinical practice. Being conscious about the flaws and disadvantages within and without the educational system help us to find the solution.

4.1. Fragmented instead of systematic

The training of communication skills at many medical schools are fragmented and less integrated (16). Sometimes due to poor top-level design, it is not deliberately considered and properly arranged in the curricular framework. It may only be involved in courses of medical ethics or psychology or just an optional isolated course. Although its importance may be repeatedly mentioned by teachers, whether the learners could acquire the relevant knowledge and skills is doubtful, because the teaching objectives are unclear and the position is improper.

This unsatisfactory situation was caused by outmoded educational concepts about medical communication skills. Even if the administrators and experts realize the importance and urgency, most of them are not likely to have received formal training themselves, thus lacking perceptual experience and rational deduction. Their own learning experience relying on observation, selfperception, trials and errors, and adjustments may lag behind the urgent demands of today.

While designing the curricular framework, the educator should reserve some space for training of communication skills, especially in the parts of doctor-patient interaction, whether it is an integrated curriculum or disciplinary-bound curriculum. The training of communication skills should be arranged in all stages of the educational plan (not only in the early stage) in order to stimulate and support the medical students and junior doctors as well (26). Programs implemented during clinical years including the specialty training period, as continuous medical education, could target specific communication problems existing in clinical setting, which may directly benefit the doctor-patient relationship (13).

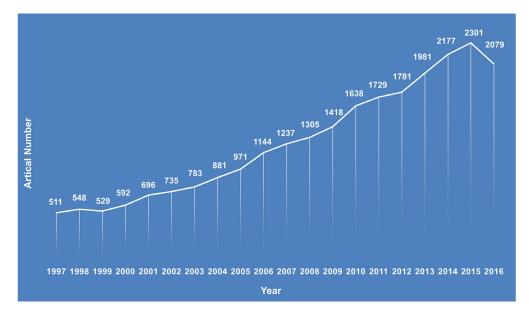


Figure 1. The number of articles titled "communication skills" between the years of 1997-2016.



Figure 2. Miller's pyramid for communication skills training.

Explicit teaching goals should be set and outcome based requirements mentioned in the grading scheme. The student assessment needs to be included in the evaluation criteria system. Finally we should get a multistage, multilevel and multiple link teaching system of medical communication throughout the whole education process (27). The learners could refine their communication skills through repeated training in recognizing and understanding ideas, theories and the processes.

4.2. Insufficient practice

Concerning the teaching approach, in China there are still quite a lot of medical schools mainly using didactic lectures. For sure didactic lecture has the advantage of cost efficiency and is easy to design and organize, but its disadvantage is obvious due to an insufficient process of internalization and application (28). Derived from Miller's pyramid, didactic lectures could just lead the learners onto the first step, "knows". However, it is the top triangle "does" that we want the doctors to perform. Focusing on practical training, we should also note that different approaches (observation, discussion, imitation, simulation or practice in reality) lead to different effects, because its virtual degree affects the facilitation of selfreflection and internalization (Figure 2).

Written information on paper could simply generate imagination in the learners' brain, so we could add group discussion to enrich the vision and perspectives. Video tapes of simulated patient interviews are provided for perpetual recognition. Visiting clinics and outpatient departments as well as taking clerkships in hospitals bring the students to the real environment and give them observational experience. Simulated medical interviews with standardized patient train and test the learners' abilities of principle adoption and responding on site. Moreover, self-evaluation by reviewing their own videos assists the learners reflecting upon their performance and adjusting. These methods bring various levels of learning experience in an order from low to high. A mixture of the approaches is recommended and the general teaching design is of great importance (29).

Teaching designs and methods should match teaching objectives, which need to be deliberately

considered. The educational goal is to facilitate deep learning of communication skills. From theory to practice, virtual environment to reality, the road map of communication skills development and progression is constructed by sequentially recognizing, reflection, adjustment and internalization.

4.3. Inadequate qualified teachers and cases

Communication skills training has been widely adopted in medical education in various countries and regions for years. However, due to the time of implementation being short and still in continuous improvement, most of the teachers haven't received systematic and formal training as the students do (30). In the past, they observed the performance of the supervisors and colleagues in daily working, practiced with real patients, and accumulated valuable experience through trial and error. Undoubtedly, some of them have extraordinary perception and sharp insight. Nevertheless, apprenticeship experience could not ensure them to be qualified communication teachers. And whether their performance in daily work reaches the expert level and is consistent with the principles and norms is unknown. This is particularly the case that teachers might mislead the students if they do not receive regular and formal training.

In addition, no matter which approach was adopted, teaching communication skills could not succeed without proper case utilization (31). Certain scenarios should be set to arouse the communication dialogue. Given the task to explain the state of illness or inform the risk of operation, the nature of the disease, the communication objective and the complexity of treatment predetermines the difficulty level of communication. Restricted teaching time should be fully used to maximum teaching effectiveness. As a result, appropriate cases should be developed on purpose, instead of occasional cases generated by chance. Cases presented in books from abroad may not be suitable for direct use due to diversity in culture and background. Case development should take the teaching goal into consideration. It should be based on the level and prior knowledge of the learners and closely relate to the application in reality in order to help solve the practical problems effectively.

4.4. Impediment from the environment

Medical students are often influenced by hidden curriculum unconsciously, which shape their professional cognition, attitude and behavior (32). A supportive learning environment and appropriate working pressure are helpful for medical students and junior doctors to refine their communication skills (33). No matter how well the learner knows and performs in the course of communication, if the supervisor doesn't care about his/her communication endeavor and if the relevant instruction and discussion are insufficiently provided, the good communication behavior fades even if he/she has the correct ideas and concepts (34). In order to solve this problem, a supportive learning environment should be built up. Moreover, the opportunities for self-reflection and critical thinking should also be provided.

4.5. Adaptation and Localization

Medical communication skills training belongs to medical ethics, which must be related to the condition of the nation and public, history and culture, religion and customs, and social phenomena. Even language expression habits influence the effectiveness of communication. Although the key issues of medical communication to be solved in different countries are similar, there might be some differences in the specific details and coping strategies. Western and eastern countries have great differences in cultural background, so the teaching materials, cases and communication curriculum from European and American medical schools could not be directly applied to medical schools in Asia. It is really a dynamic process to tailor a curriculum and it needs continual evaluation, feedback, and improvement (35).

Additionally, it is essential to have thorough studies on the native medical communication phenomena and existing problems, as well as studies on diagnostic evaluations of the implemented programs and courses (*36*). Taking the results of investigation and evaluation as the reference for curriculum design and teaching arrangements, we are able to better solve the problem of localization for communication skills training.

5. Conclusions

The progressions of medical communication education in different countries are not balanced. The western developed countries started early, accumulating much valuable experience based on innovative reforms. Some developing countries and regions, such as China, are still in the initial stage both in research and education, continuously exploring a feasible scheme (*37,38*).

Asia has a dense population and the health care system is far from properly constituted. Lacking human resources, health professionals are facing tremendous pressure. If we do not pay enough attention to the medical needs of the general public at present and in the near future, the cost may be unaffordable.

The third generation of medical education reform emphasizes patient and population centeredness. The reform is featured by competency-based curriculum applied to medical schools globally (*11*). For those who just set out, great efforts should be made on research and practice in teaching medical communication according to the requirements of competency-based education. Only in this way, can we better cope with the changing medical environment in the forthcoming age.

References

- Sibille K, Greene A, Bush JP. Preparing physicians for the 21st century: Targeting communication skills and the promotion of health behavior change. Ann Behav Sci Med Educ. 2010; 16:7-13.
- Waleska-Siempinska M. The ethical message of the history of medicine as a guideline for modern medicine. Arch Hist Filoz Med. 2000; 63:97-101.
- de Haes H, Bensing J. Endpoints in medical communication research, proposing a framework of functions and outcomes. Patient Educ Couns. 2009; 74:287-294.
- Baykan Z, Oktem IS, Cetinkaya F, Nacar M. Physician exposure to violence: A study performed in Turkey. Int J Occup Saf Ergon. 2015; 21:291-297.
- Wang Y, Fang M, Wang Y. How to decrease violence against doctors in China? Int J Cardiol. 2016; 211:66.
- Shan L, Li Y, Ding D, Wu Q, Liu C, Jiao M, Hao Y, Han Y, Gao L, Hao J, Wang L, Xu W, Ren J. Patient satisfaction with Hhospital inpatient care: Effects of trust, medical insurance and perceived quality of care. Plos One. 2016; 11:e164366.
- Ventura HO. Giovanni Battista Morgagni and the foundation of modern medicine. Clin Cardiol. 2000; 23:792-794.
- Morrison JL, Lantos JD, Levinson W. Aggression and violence directed toward physicians. J Gen Intern Med. 1998; 13:556-561.
- Butalid L, Verhaak PF, Boeije HR, Bensing JM. Patients' views on changes in doctor-patient communication between 1982 and 2001: A mixed-methods study. Bmc Fam Pract. 2012; 13:80.
- Liang W, Xie J, Fu H, Wu EQ. The Role of health economics and outcomes research in health care reform in China. PharmacoEconomics. 2014; 32:231-234.
- Frenk J, Chen L, Bhutta ZA, *et al.* Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world. Lancet. 2010; 376:1923-1958.
- Henry SG, Holmboe ES, Frankel RM. Evidence-based competencies for improving communication skills in graduate medical education: A review with suggestions for implementation. Med Teach. 2013; 35:395-403.
- Hargie O, Boohan M, McCoy M, Murphy P. Current trends in communication skills training in UK schools of medicine. Med Teach. 2010; 32:385-391.
- Pickren W. Psychology and medical education: A historical perspective from the United States. Indian J Psychiatry. 2007; 49:179-181.
- Junod P, Sommer J, Louis-Simonet M, Nendaz M. Teaching communication skills: Beyond wishful thinking. Swiss Med Wkly. 2015; 145:w14064.
- Silverman J. Teaching clinical communication: A mainstream activity or just a minority sport? Patient Educ Couns. 2009; 76:361-367.
- Cary J, Kurtz S. Integrating clinical communication with clinical reasoning and the broader medical curriculum. Patient Educ Couns. 2013; 92:361-365.
- Gude T, Bærheim A, Holen A, Anvik T, Finset A, Grimstad H, Hjortdahl P, Risberg T, Vaglum P. Comparing self-reported communication skills of medical students in traditional and integrated curricula: A nationwide study. Patient Educ Couns. 2005; 58:271-278.

- Karkowsky CE, Chazotte C. Simulation: Improving communication with patients. Semin Perinatol. 2013; 37:157-160.
- Lane C, Rollnick S. The use of simulated patients and role-play in communication skills training: A review of the literature to August 2005. Patient Educ Couns. 2007; 67:13-20.
- Gillis AE, Morris MC, Ridgway PF. Communication skills assessment in the final postgraduate years to established practice: A systematic review. Postgrad Med J. 2015; 91:13-21.
- 22. Beaulieu MD, Haggerty JL, Beaulieu C, Bouharaoui F, Levesque JF, Pineault R, Burge F, Santor DA. Interpersonal communication from the patient perspective: Comparison of primary healthcare evaluation instruments. Healthc Policy. 2011; 7:108-123.
- Assis-Hassid S, Heart T, Reychav I, Pliskin JS, Reis S. Existing instruments for assessing physician communication skills: Are they valid in a computerized setting? Patient Educ Couns. 2013; 93:363-366.
- Makoul G. The SEGUE Framework for teaching and assessing communication skills. Patient Educ Couns. 2001; 45:23-34.
- Hulsman RL. Shifting goals in medical communication. Determinants of goal detection and response formation. Patient Educ Couns. 2009; 74:302-308.
- Roze DOA, Doig CJ, Couillard P, Lord J. From communication skills to skillful communication: A longitudinal integrated curriculum for critical care medicine fellows. Acad Med. 2017; 92:501-505.
- Rotthoff T, Baehring T, David DM, Bartnick C, Linde F, Willers R, Schäfer RD, Scherbaum WA. The value of training in communication skills for continuing medical education. Patient Educ Couns. 2011; 84:170-175.
- Berkhof M, van Rijssen HJ, Schellart AJM, Anema JR, van der Beek AJ. Effective training strategies for teaching communication skills to physicians: An overview of systematic reviews. Patient Educ Couns. 2011; 84:152-162.
- 29. Bowyer MW, Hanson JL, Ph. D, Pimentel EA, Flanagan

AK. Association for academic surgery teaching breaking bad news using mixed reality simulation. J Surg Res. 2010; 159:462-467.

- Wouda JC, van de Wiel HBM. The communication competency of medical students, residents and consultants. Patient Educ Couns. 2012; 86:57-62.
- Yoo MS, Park HR. Effects of case-based learning on communication skills, problem-solving ability, and learning motivation in nursing students. Nurs Health Sci. 2015; 17:166-172.
- 32. Rogers DA, Boehler ML, Roberts NK, Johnson V. Using the hidden curriculum to teach professionalism during the surgery clerkship. J Surg Educ. 2012; 69:423-427.
- van den Eertwegh V, van Dalen J, van Dulmen S, van der Vleuten C, Scherpbier A. Residents' perceived barriers to communication skills learning: Comparing two medical working contexts in postgraduate training. Patient Educ Couns. 2014; 95:91-97.
- 34. Malhotra A, Gregory I, Darvill E, Goble E, Pryce-Roberts A, Lundberg K, Konradsen S, Hafstad H. Mind the gap: Learners' perspectives on what they learn in communication compared to how they and others behave in the real world. Patient Educ Couns. 2009; 76:385-390.
- Bylund CL, Alyafei K, Anand A, Al MA, Omer W. Implementing and tailoring a western-developed communication skills training program for graduate medical trainees in Qatar. Int J Med Educ. 2017; 8:16-18.
- Salmon P, Young B. Core assumptions and research opportunities in clinical communication. Patient Educ Couns. 2005; 58:225-234.
- Liu X, Rohrer W, Luo A, Fang Z, He T, Xie W. Doctorpatient communication skills training in mainland China: A systematic review of the literature. Patient Educ Couns. 2015; 98:3-14.
- Yin K, Huang Y, Wilkes MS, Gao H. Teaching communication skills to undergraduate medical students in China. Med Teach. 2016; 38:636.

(Received April 5, 2017; Revised April 18, 2017; Accepted April 21, 2017)