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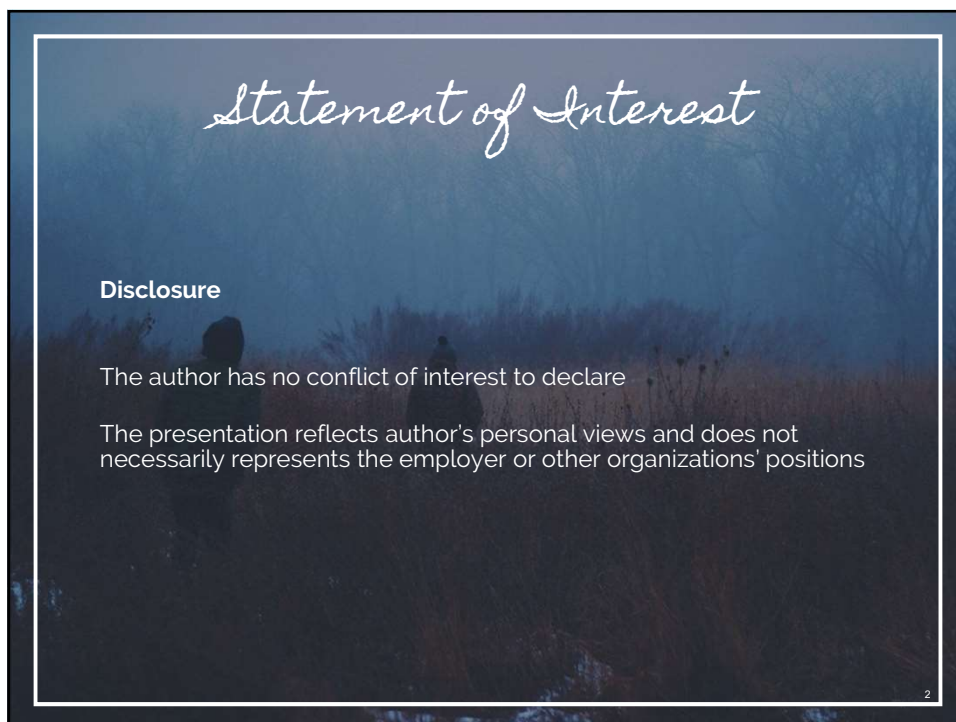
Why clinical communication skills really matter

Simulation as an example of effective teaching and learning methods

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Statement of Interest

Disclosure

The author has no conflict of interest to declare

The presentation reflects author's personal views and does not necessarily represents the employer or other organizations' positions

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Presentation Outline

1. Presenter's origin
2. Healthcare and clinical communication
3. The importance of clinical communication skills for effective pharmacy practice
4. Simulation as a tool for teaching & learning successful pharmacist-patient communication
5. Final remarks

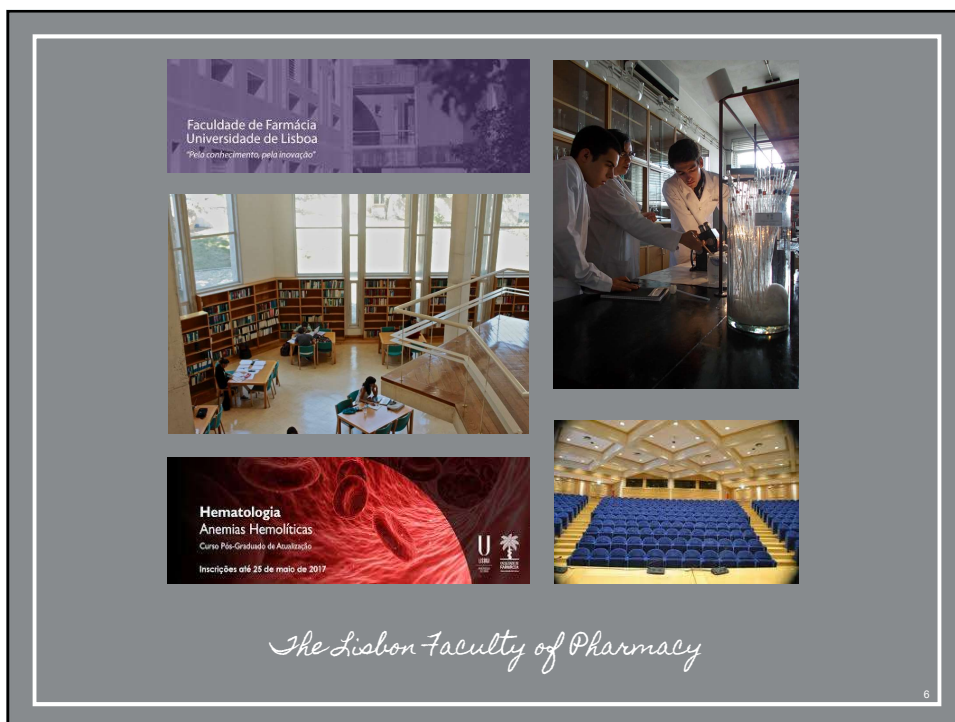
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1. Presenter's origin

Usual location

Present location

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2. What is healthcare communication?

Healthcare (HC) practice: HC professionals interacting with patients

- 2 connecting persons with the aim of establishing a healthcare relationship e.g. a pharmacist CARING for a patient health status and welfare

Interaction through communication: why do we communicate?¹

- To make sense of what surrounds us and to be able to act upon reality, both on personal and professional lives
- Communication is a basic social urge that influences our motivation and behaviours

A vision at the heart of healthcare systems¹

- A social and political priority that sets the aims of clinical actions: to pursue an ideal practice that responds to patients' health needs

1. Hugman B. Healthcare communication. London: Pharmaceutical Press; 2009.

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2. What is healthcare communication?

Authentic healthcare communication^{2,3}

- Healthcare professionals (HCPs) serving the best interests of the patient, in recognizable and consent terms by the patient i.e. being altruistic
- HCPs taking and keeping the truth as far as known: being transparent and honest about the strength of evidence and the uncertainty
- HCPs working in partnership: negotiating demands from and setting limits to patients (and him/herself)

2. Møllerud K. Qualitative research: Standards, challenges, and guidelines. Lancet. 2001;358(9280):483-8.

3. Rantucci MJ. Pharmacists Talking with Patients. A guide to patient counseling. Lippincott Williams & Wilkins; 2007.

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2. What is healthcare communication?

Effective healthcare communication^{1,4}

- A reciprocal, interactive process in which both sender and receiver share responsibilities to ensure messages are understood
- HCPs' accountability: messages have to be tailored to the personality, needs and abilities of each patient
- Effective communication strengthens patient's engagement and promotes the agreed actions
- **Communications quality: as important to patients' welfare and outcomes as every other aspect of healthcare provision e.g. applied pharmacotherapeutic knowledge**
- **"Better communication. Better relationships. Better care."**⁵

1. Hugman B. Healthcare communication. London: Pharmaceutical Press; 2009.
4. Shah B, Chewing B. Conceptualizing and measuring pharmacist-patient communication: a review of published studies. Research in Social and Administrative Pharmacy. 2006 Jun 30;2(2):153-85.
5. Academy of Communication in Healthcare (USA). (Accessed 11 Oct 2018).

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2. What is clinical communication?

Clinical communication^{1,6}

- A core concept: HPCs ability to interact and take care of ill persons, communicating both **healing-focused** and **human-centred**
- Comprises, besides scientific knowledge: functional communication, situational awareness, attention to personal features, attention to interpersonal dynamics
- Core skills (1): empathetic attention, active listening, ability to elicit useful information (sensitive questioning), emotional intelligence, etc.
- Core skills (2): careful explanation, checking for message full understanding (at all stages), etc.

1. Hugman B. Healthcare communication. London: Pharmaceutical Press; 2009.
6. Berger BA. Communication skills for pharmacists: building relationships, improving patient care. Amer. Pharmacists Ass; 2005.

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3. *The importance of clinical communication skills*

True clinical communication is patient-centred^{7,8}

- Patient-centred care (IOM): providing care that is respectful of, and responsive to, individual patient preferences, needs and values, and ensuring that patient values guide all clinical decisions
- Patient-centred communication improves patient's health status and increases the efficiency of care e.g. by reducing diagnostic tests and referrals

Linking HCPs-patient communication to health outcomes⁹

- The dialogue itself have a therapeutic effect
- BUT, usually clinical communication influences health outcomes via an indirect route

7. IOM COOHC USA. Crossing the quality chasm: a new health system for the 21st century. Washington, DC, 2001.
8. Stewart M, Brown JB, Donner A, McWhinney IR, Oates J, Weston WW, Jordan J. The impact of patient-centered care on outcomes. Family Practice. 2000 49: 796-804
9. Street RL, Makoul G, Arora NK, Epstein RM. How does communication heal? Pathways linking clinician-patient communication to health outcomes. Patient education and counseling. 2009 Mar 31;74(3):295-301.

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3. *The importance of clinical communication skills*

Linking HPCs-patient communication to health outcomes⁹

- Proximal outcomes e.g. patient understanding, trust, and HPCs-patient agreement
 - Influence on intermediate outcomes e.g. increased adherence, better self-care skills which, in turn, affect health and wellbeing

Clinical communication and pathways to health outcomes⁹

- Increased access to care and social support
- Greater patient knowledge and shared understanding
- Higher quality medical decisions
- Enhanced therapeutic alliances
- Patient agency and empowerment
- Better management of emotions

9. Street RL, Makoul G, Arora NK, Epstein RM. How does communication heal? Pathways linking clinician-patient communication to health outcomes. Patient education and counseling. 2009 Mar 31;74(3):295-301.

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4. The importance of clinical communication skills

Effect of patient-HCPs relationship on health outcomes^{10,11}

- There is a small ($d=0.11$), but statistically significant ($p=0.22$) effect on either objective or validated subjective healthcare outcomes
- 60% of the studies showed positive effect on objective parameters, such as information gathering and provision, relational skills for treatment-related emotions and behaviour, as well costs reduction

Effect of patient-HCP interaction on common cold¹²

- Patients perceiving clinicians as empathetic: severity, duration and objective measures (e.g. IL-8 and neutrophil counts) improve significantly ($p<0.01$)

10. Kelley JM, Kraft-Todd G, Schapira L, Kossowsky J, Riess H. The influence of the patient-clinician relationship on healthcare outcomes: a systematic review and meta-analysis of randomized controlled trials. *PLoS one*. 2014 Apr; 9(4):e94207.
 11. Riechl D, Schüller G. The Influence of Doctor-Patient Communication on Health Outcomes: A Systematic Review. *Zeitschrift für Psychosomatische Medizin und Psychotherapie*. 2017 Jun; 163(2):131-50.
 12. Rakel D, Barrett B, Zhang Z, Hoeff T, Chewning B, Marchand L, Scheder J. Perception of empathy in the therapeutic encounter: Effects on the common cold. *Patient education and counseling*. 2011 Dec; 31(6):339-7.

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Improving pharmacists' clinical and patient-centred communication¹³

Using models for patient consultation i.e. structuring the encounter to be recognised as a (real) consultation

Promoting the continuous advance of communication and relational competences, to the same degree of traditional knowledge and skills

Developing openness with patients: applying strategies of listening, acknowledging and surprise acceptance

Developing openness with oneself and colleagues: applying strategies of recognizing, questioning and reflecting

13. De Oliveira DR, Shoemaker S. Achieving patient centeredness in pharmacy practice: openness and the pharmacist's natural attitude. *Journal of the American Pharmacists Association*. 2006; 46(1): 66-66.

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4. Simulation as a teaching & learning method

Simulation^{14,15}

- Teaching and assessing, skills and competences acquisition, through an interactive experience conceived as a professional activity

Main advantages of simulation^{14,15}

- Safety of those involved (especially, the patient)
- Controlled environment: the same configuration, immediate feedback and review and evaluation, for all students
- Allow: mistakes, to observe consequences and learn with errors
- Enables repetition: increased professional confidence by reduction of anxiety during practice
- Supplements usual practice limitations e.g. rare cases, infrequent conditions
- May alleviate limitations related to human resources for teaching

14. Lin K, Travlos DV, Wadelin JW, Viasses PH. Simulation and introductory pharmacy practice experiences. American journal of pharmaceutical education. 2011 Dec 15;75(10):209.
15. Smithson J, Bellingan M, Glass B, Mills J. Standardized patients in pharmacy education: An integrative literature review. Currents in Pharmacy Teaching and Learning. 2015 Nov 17(6):651-63.

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4. Simulation as a teaching & learning method

Main disadvantages of simulation^{14,15}

- Not real i.e. not equivalent to working with people: personal, emotional and environmental distractions are usually absent
- Educational gains depend on students' acceptance, motivation, and involvement
- Cost of equipment (sophistication) and need for prepared operators (technical and clinical training)
- Lack of guarantee of return on investment: will students be better prepared for practice...?

14. Lin K, Travlos DV, Wadelin JW, Viasses PH. Simulation and introductory pharmacy practice experiences. American journal of pharmaceutical education. 2011 Dec 15;75(10):209.
15. Smithson J, Bellingan M, Glass B, Mills J. Standardized patients in pharmacy education: An integrative literature review. Currents in Pharmacy Teaching and Learning. 2015 Nov 17(6):651-63.

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4. Simulation as a teaching & learning method

Simulated or standardized patients¹⁶

- Real people: trained healthy actors (clinical history, symptoms, emotions display)
- Non-invasive tasks, excellent to develop communication skills

Main advantages of using simulated patients¹⁶

- High acceptance and satisfaction e.g. as an evaluation tool (OSCEs)
- Effective acquisition of knowledge and skills

Main disadvantages of using simulated patients¹⁶

- Issues on equal transfer of knowledge, scalability and standardization
- Usually, not feasible an increment of repetition and detailing
- High costs associated with training and recycling i.e. placing different scenarios for the same simulated patient

16. Smithson J, Bellingan M, Glass B, Mills J. Standardized patients in pharmacy education: An integrative literature review. *Currents in Pharmacy Teaching and Learning*. 2015; Nov 17(10):851-83. 17

4. Simulation as a teaching & learning method

Mannequins or high-fidelity human simulators^{17,18,19}

- Mimetic of human actions and physiology e.g. heart and breath sounds, blood pressure, sweating, cyanosis, tremor, etc.
- May represent a specific pathology or a variety of disease states, responding to physiological and pharmacological interventions

Main advantages of mannequins/dummies^{17,18,19,20}

- Control of parameters by initial programming and responses
- High acceptance and good impact on interdisciplinary work skills
- Higher educational efficacy compared to case resolution, including pharmacotherapy training

17. Seybert AL, Laughlin WK, Benedict NJ, Barton CM, Rea BS. Pharmacy student response to patient-simulation mannequins to teach performance-based pharmacotherapeutics. *American Journal of Pharmaceutical Education*. 2006 Sep;70(3):48.
18. Crea KA. Practice skill development through the use of human patient simulation. *American Journal of Pharmaceutical Education*. 2011 Nov 10;75(9):188.
19. Seybert AL, Barton CM. Simulation-based learning to teach blood pressure assessment to doctor of pharmacy students. *American journal of pharmaceutical education*. 2007 Sep;71(3):48.
20. Seybert AL, Koblinsky LR, McKaveney TP. Human patient simulation in a pharmacotherapy course. *American journal of pharmaceutical education*. 2008 Sep;72(2):37. 18

4. Simulation as a teaching & learning method

Main disadvantages of mannequins/dummies^{17,18,19}

- High cost of acquisition and maintenance (>90.000\$)
- Dedicated functional space and associated equipment
- Initial presence of a specialist to support programming

Computer-based simulation^{21,22}

1. Clinical cases running in computers and accessed through local software or via WWW pages

- Large number of clinical cases and many students simultaneously, accessing additional educational materials (e.g. documents, videos)
- Cases evolution & follow-up, plus online students' assessment
- Savings in human resources and time

17. Seybert AL, Laughlin KK, Benedict NJ, Barton CM, Rea RS. Pharmacy student response to patient-simulation mannequins to teach performance-based pharmacotherapeutics. *American Journal of Pharmaceutical Education*. 2006 Sep;70(3):48.
 18. Crea KA. Practice skill development through the use of human patient simulation. *American Journal of Pharmaceutical Education*. 2011 Nov 10;75(9):188.
 19. Seybert AL, Barton CM. Simulation-based learning to teach blood pressure assessment to doctor of pharmacy students. *American Journal of pharmaceutical education*. 2007 Sep;71(3):48.
 21. Marriott J.L. Development and implementation of a computer-generated "virtual" patient program. *Pharmacy Education*. 2007;7.
 22. Noori A, Kouti L, Akbari F, Assarian M, Rakhshan A, Eslami K. A review on different virtual learning methods in pharmacy education. *Journal of pharmaceutical care*. 2015 Oct 11;2(2):77-82.

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4. Simulation as a teaching & learning method

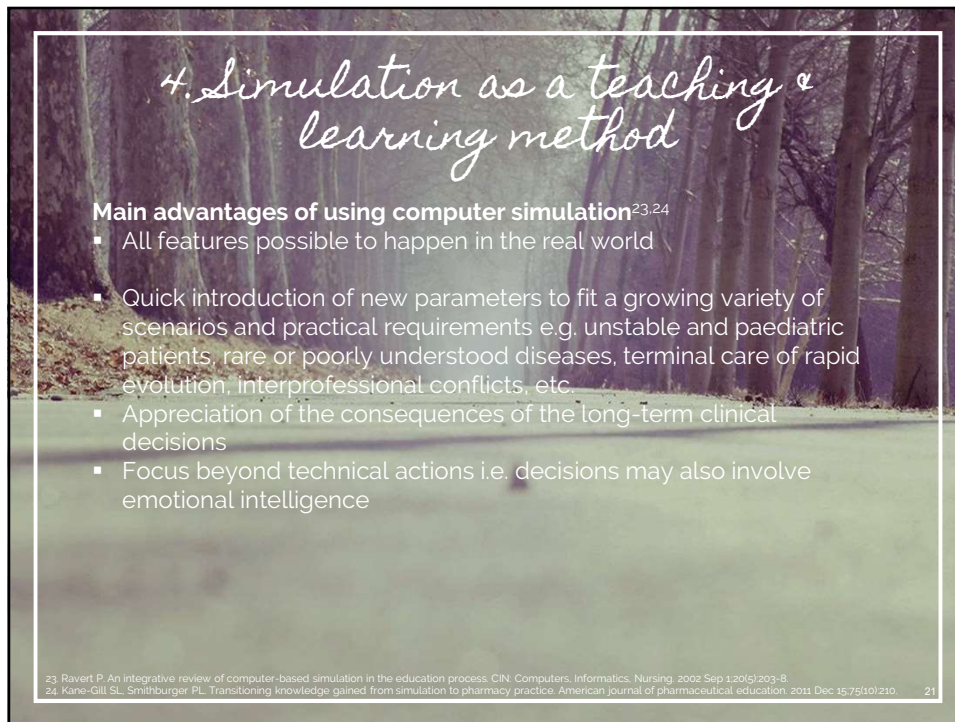
Computer-based simulation^{21,22}

2. Virtual reality: video animations running in computers through dedicated graphics programs or via WWW pages

- Reality replication through computer modelling of a multitude of virtual patients in different environments
 - Virtual patients can be combined with other simulation options, including resources for multidisciplinary interaction
- Immersive virtual reality: requiring additional equipment e.g. headsets and/or rooms (3D projection and sound)

21. Marriott J.L. Development and implementation of a computer-generated "virtual" patient program. *Pharmacy Education*. 2007;7.
 22. Noori A, Kouti L, Akbari F, Assarian M, Rakhshan A, Eslami K. A review on different virtual learning methods in pharmacy education. *Journal of pharmaceutical care*. 2015 Oct 11;2(2):77-82.

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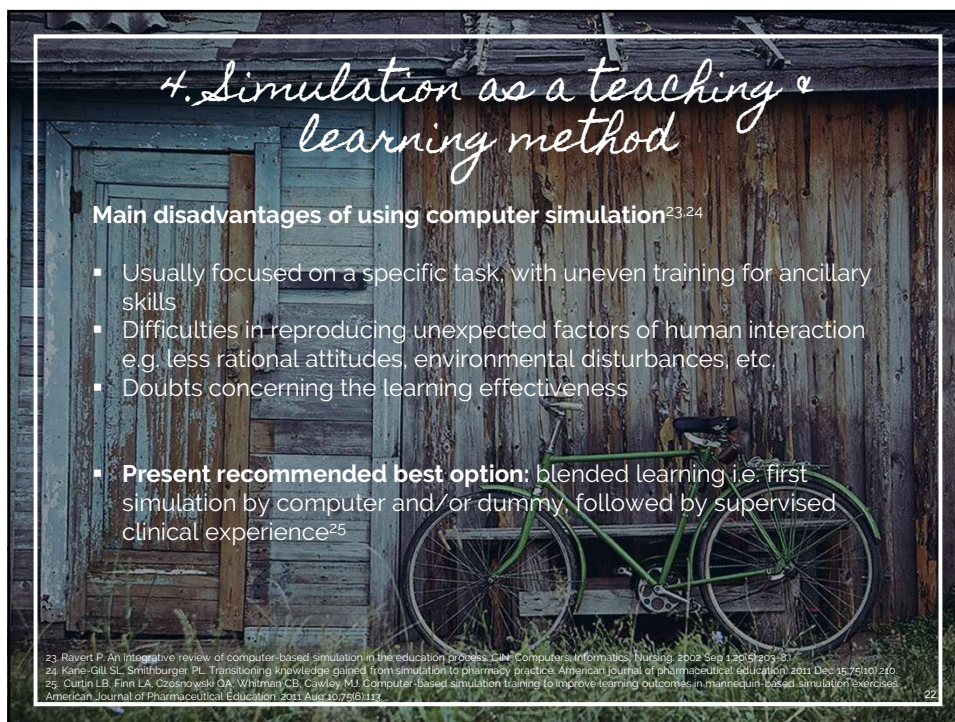


4. Simulation as a teaching & learning method

Main advantages of using computer simulation^{23,24}

- All features possible to happen in the real world
- Quick introduction of new parameters to fit a growing variety of scenarios and practical requirements e.g. unstable and paediatric patients, rare or poorly understood diseases, terminal care of rapid evolution, interprofessional conflicts, etc.
- Appreciation of the consequences of the long-term clinical decisions
- Focus beyond technical actions i.e. decisions may also involve emotional intelligence

23. Ravert P. An integrative review of computer-based simulation in the education process. CIN: Computers, Informatics, Nursing. 2002 Sep 1;20(5):203-8.
24. Kane-Gill SL, Smithburger PL. Transitioning knowledge gained from simulation to pharmacy practice. American journal of pharmaceutical education. 2011 Dec 15;75(10):210. 21



4. Simulation as a teaching & learning method

Main disadvantages of using computer simulation^{23,24}

- Usually focused on a specific task, with uneven training for ancillary skills
- Difficulties in reproducing unexpected factors of human interaction e.g. less rational attitudes, environmental disturbances, etc.
- Doubts concerning the learning effectiveness
- **Present recommended best option:** blended learning i.e. first simulation by computer and/or dummy, followed by supervised clinical experience²⁵

23. Ravert P. An integrative review of computer-based simulation in the education process. CIN: Computers, Informatics, Nursing. 2002 Sep 1;20(5):203-8.
24. Kane-Gill SL, Smithburger PL. Transitioning knowledge gained from simulation to pharmacy practice. American journal of pharmaceutical education. 2011 Dec 15;75(10):210.
25. Curtin LB, Finn LA, Czosnowski OA, Whitman CB, Cawley MJ. Computer-based simulation training to improve learning outcomes in mannequin-based simulation exercises. American Journal of Pharmaceutical Education. 2011 Aug 10;75(6):118. 22

5. Final remarks

Pharmacists' communication skills development^{26,27,28,29}

- *Further training:* pharmaceutical education with a honest focus on simulated patient methods, including virtual practice environments
- *Further research:* pharmacy practice research should consider the influence of pharmacists' communication skills on health outcomes

➤ **Take seriously:** effective written & spoken communication, dealing with complaints & apologies, dealing with public relations & media

➤ **Get specialists on board:** to help with dealing and training tough topics e.g. medication errors & patient safety, sex & sexual orientation, dying & death, etc.

26. Mesquita AR, Lyra DP, Brito GC, Balisa-Rocha BJ, Aquar PM, de Almeida Neto AC. Developing communication skills in pharmacy: a systematic review of the use of simulated patient methods. Patient education and counseling. 2010 Feb;28(2):143-8.
 27. Babinec PM, Rock MJ, Lorenzetti DL, Johnson JA. Do researchers use pharmacists' communication as an outcome measure? A scoping review of pharmacist involvement in diabetes care. International Journal of Pharmacy Practice. 2010 Aug;118(4):183-95.
 28. Rickles NM, Tsui P, Myers L, Gabel S, Chung V. The impact of a standardized patient program on student learning of communication skills. American journal of pharmaceutical education. 2009 Sep;73(1):4.
 29. Hussainy SY, Styles K, Duncan G. A virtual practice environment to develop communication skills in pharmacy students. American journal of pharmaceutical education. 2012 Dec;76(10):202.

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“The single biggest problem in communication is the illusion that it has taken place”

George Bernard Shaw

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Thank you for your attention!
Хвала на пажњи!

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