Annals of PIMS ISSN:1815-2287

Editorial

Andragogy (Adult Learning)

Komail Malik¹, Tanwir Khaliq²

¹House Officer, Pakistan Institute of Medical Sciences, Islamabad ²Director, Department of Medical Education, Shaheed Zulfiqar Ali Bhutto Medical University, Islamabad Email: ktanwir@hotmail.com

Adult learning is frequently taken as a separate domain having very little connection to learning in childhood and adolescence. Adults have special needs and requirement as learners. In this editorial an attempt has been made to examine critically, how adult learning is different, in the light of Knowles five assumptions of andragogy and various learning theories. It also highlights how learning principles derived can be used in actual practice to improve patient outcome. It explores three important issues embedded in Knowles five assumptions; (1) what are important characteristics of an adult learner? (2) What can learning/teaching strategies be used for effective learning in adults? And (3) how an effective teacher can enhance learning in adults?

Adult are independent(autonomous) and selfdirecting

Adults spend considerable time and energy exploring what would be the benefit of learning something and what would be the cost of not learning it before they are willing to invest their time in learning it. They are seldom convinced by someone that it would be good for them.³ Self-directed learning allows adults to set their own goals and objectives and adopt their desired learning methods to achieve those targets. They are in control of the entire process and they themselves gauge their progress.⁴ Self-directed learning improves the encoding of more complex information and enhances the working memory.⁵

Training should be based on valid needs of the intended audience and activities should take place around real work experience. Adult learning should incorporate many options for learning. Learners should clearly know the reasons and benefits of learning.

 Learners should be allowed to fully explore the domain of self-directed learning.

- Learners should be facilitated by teachers and peers in the process of self-directed learning, by providing adequate feedback and tools of self-assessment, accompanied by opportunities to practice in areas that need improvement.
- The teachers must actively involve the adult participant in the learning process and serve as facilitators for them
- Adults should be given time and opportunity to search new information and explore technology.

An important disadvantage of self-direction is; adults can deny the importance of collective action, common interests and their basic interdependence in favour of an obsessive focus on the self.

2. They have accumulated a great deal of experience, which is a rich source for learning

Adults bring into the learning situation, a background of experience that is a rich resource. It is important to construct new ideas and skills on the broader-based experience of adults. Here the concept of schema activation can be used where prior relevant knowledge is activated before a learning activity and new knowledge is always built on the prior knowledge. This helps the learner to comprehend new information and will guide their thinking about the new topic. Facilitator can stimulate schema activation by pre-teaching, discovery guided learning, classroom discussions, brainstorming and clarifying salient concepts.⁶

Teachers should draw out participants' experience and knowledge which is relevant to the topic. It is important to recognize that the quantity or length of experience is not necessarily connected to its richness or intensity.⁷

3. They value learning that is integrated with the demands of their everyday life

Annals of PIMS ISSN:1815-2287

Adults are goal oriented and follow the learning activities with clear objectives. They are also relevancy oriented and look for the learning which is of value for them.

It is very important that adults should know; they need training before actual learning. Therefore, it is mandatory that adults should receive training which is as close as possible to the time when it is needed.

Always inform the learner that a particular piece of information or training will be used in the future.

They are more interested in immediate, problemcentered approaches than in subject centered ones

Adults compared to children have a wealth of experience and therefore develop a task-centered or problem centered orientation to learning. They are more interested in problem-solving so that they can use their experience. The learning activities should focus on doing something with information rather than simply knowing the information.

The learning strategies should be designed in such way that the learners are solving problems and performing tasks. These problems and tasks should be close to what they encounter during their day to day practice. Facilitate learners how information is used to complete the problem-solving activities.

If the idea of training is to acquire problem-solving skills, the objective of learning will be the development of skills and knowledge with a clearly defined purpose. This assumption is not, however, addressed in studies examining emotional learning or development of emotional intelligence.

They are more motivated to learn by internal drives than by external ones.

Adult learning is affected by both extrinsic and intrinsic motivators. The more potent, strong and persistent motivators are intrinsic such as the need for self-esteem, broadened responsibilities, power and achievements. Adults will learn when they perceive, a need to learn you cannot 'tell' them to learn.9

Quality training is built around the concept of nourishing the intrinsic motivators.

Learning activities should clearly show to the learner where he or she can apply and get benefit in their jobs.

Adults, like other learners, need to be shown respect. The teacher or facilitator should give due regard to their experience and knowledge and should allow them a free opinion in the classroom.

Critical reflection (adult learner reflects on their actions)

Critical reflection is an important dimension of adult learning, therefore, this aspect is discussed in detail. The theory of reflective practice pioneered by Schon¹⁰ revolves around three key concepts; knowing in action, reflection in action, and reflection on reflection in action11. Knowing in action is the tacit knowledge, the sort of knowledge that is unarticulated but revealed in our intelligent actions. Reflection in action is a conscious thought about our actions and about the thinking that accompanies them. It occurs immediately and it is the ability to learn and develop continually by creatively applying current and past experiences and reasoning to unfamiliar events while they are occurring. Reflection on reflection in action occurs later. This process happens when with the assistance of a skilled teacher students construct new knowledge and so much more than they could have done alone. Activities such as debriefing with peers or learners, seeking feedback from learners and keeping a journal can provide vehicles for reflective practice.12

In summary, adult learning is a process where students are the active role players in the classroom and teachers have a more passive role, not as the sole source of information but rather as facilitators in the process of self-learning.

All these educational theories are helpful in teaching practices depending on a particular context.^{13, 14} Adopting these theories and principals in medical classrooms may allow for a more effective method of learning, with a more long-term acquisition of knowledge and skills.¹⁵ This will bring better curriculum, teaching methods, assessment techniques and clinical setting. Better learning experience will enhance knowledge, skills and positive attitude (in learners and future educators) which in turn will improve practice in clinical setting and better patient outcome.¹⁶

References

- Smith, M. K. 'Malcolm Knowles, informal adult education, selfdirection and anadragogy', the encyclopedia of informal education, (2002). Available URL www.infed.org/thinkers/etknowl.htm.
- Savicevic D M Modern conceptions of andragogy: A European framework. Studs. In the Ed. of Adults. 1991 23 (2): 179-201.
- Bruning RH, Schraw GJ, Norby MM, Ronning RR, Belief about self (autonomy and control). In; Cognitive psychology and instructions.4th edition: Pearson Prentice Hall; 2004.p.193-211.
- Patterson C, Crooks D, Lunyk-Child O. A new perspective on competencies for self-directed learning. J Nurs Educ. 2002 Jan; 41(1):25-31.
- Tagawa M. Physician self-directed learning and education Kaohsiung J Med Sci 2008 Jul; 24(7):380-5.

Ann. Pak, Inst. Med. Sci. 2017 301

Annals of PIMS ISSN:1815-2287

- Barrows HS. Problem-based, self-directed learning. JAMA 1983; 250: 3077-3080.
- Bruning RH, Schraw GJ, Norby MM, Ronning RR, Editors. Encoding processes (schema activation) In; Cognitive psychology and instructions. 4th edition: Pearson Prentice Hall;2004.p.75-76.
- Kolb DA. Experiential learning: experience as a source of learning and development. Englewood Cliffs, NJ. Prentice Hall, 1984
- Harden RM, Laidlaw JM, Ker JS, Mitchell HE. Task based learning: an educational strategy for undergraduate, postgraduate and continuing medical education. Dundee: Association for Medical Education in Europe, 1996(Medical education booklet No 7.)
- Smith, M. K. (2001) 'Donald Schön: learning, reflection and change', the encyclopedia of informal education, www.infed.org/thinkers/et-schon.htm
- Bruning RH Schraw GJ, Norby MM, Ronning RR, Editors.Classroom context for cognitive growth (Schons reflective practitioner model). In Cognitive psychology and instructions.4th edition: Pearson Prentice Hall; 2004.p.193-211.
- Mamede S, Schmidt HG. The structure of reflective practice in medicine. Medical Education. 1999; (38) 12: 1302-8.
- Spencer JA and Jordan RK; Learner centred approaches in medical education BMJ May 1999; 318: 1280 – 1283

- Kaufman DM, Mann KV, Jennet P. Teaching and learning in medical education: how theory can inform practice. London: oscitation for the Study of Medical Education, 2000.
- Chastonay P, Brenner E, Peel S, Guilbert J-J. The need for more efficacy and relevance in medical education. Med Educ 1996; 30: 235-238.
- Petersen S. Time for evidence based medical education Tomorrow's doctors need informed educators not amateur tutors BMJ 1999; 318:1223-1224.

Further Reading

- Knowles, M. S. (1950) Informal Adult Education, New York: Association Press. Guide for educators based on the writer's experience as a programme organizer in the YMCA.
- Knowles, M. S. (1962) A History of the Adult Education Movement in the USA, New York: Krieger. A revised edition was published in 1977.
- Knowles, M. (1975). Self-Directed Learning. Chicago: Follet.
- Knowles, M. (1984). The Adult Learner: A Neglected Species (3rd Ed.). Houston, TX: Gulf Publishing.
- Knowles, M. (1984). Andragogy in Action. San Francisco: Jossey-Bass.
- Kearsley, G. (2010). Andragogy (M.Knowles). The theory Into practice database. Retrieved from http://tip.psychology.org

Ann. Pak, Inst. Med. Sci. 2017 302