

The Impact of E-Learning on Nurses' Professional Knowledge and Practice in HMC

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Introduction:

Continuing education in a clinical environment is a challenge for all health care providers. E-learning is increasingly used in Hamad Medical Corporation - QATAR. In line with the IT (Information Technology) Strategy implementation, the Learning opportunities were provided through the online program catered by ictQATAR (the Supreme Council of Information and Communication Technology) to promote the staff management, leadership and IT skills.

Despite the staff ambition to enroll in the E-learning program and their feedback on the positive impact of the program on their knowledge and practice, there is no official statistics available to reflect this feedback or to measure the benefits they gained and the reflection on their professional knowledge and practice.

Aim of the Study:

To assess the impact of E-learning on the nurses' knowledge and practice in HMC.

Other Objectives:

- Assess the factors influencing the utilization of E-learning in HMC.
- Assess the need for more E-learning courses among nurses.
- Identify the mostly accessed topics by the nurses.

Methods:

A descriptive study design using structured Questionnaire was distributed among 70 nurses who attended the E-learning courses and work in different departments at Hamad Medical Corporation (HMC).

The questionnaire contains two sections which consist of:

Section I: General information about the participants; the age, educational level, designation, years of experience, facility, and classification of computer skills of participants.

Section II: Data related to the E-learning courses' names, benefits, effectiveness, and achievement of objectives in relation to staff day to day nursing activities, methods of learning preferred by nurses, obstacles faced during the completion of E-learning courses.

Table1: Originally, the degree of likeness of methods of learning were assessed on 5 likert scale which are 1=least liked and 5=mostly liked. At the time of analysis, it was grouped together accordingly: (1=least liked and 2=fairly liked) as disliked and (4=liked and 5=mostly liked) as liked.

Findings:

29% of nurses responded to the questionnaire among which more than half of the participants fall into the age group 36-45 years. The majority agreed that the e-learning courses improved their performance and helped them in their day to day activities. However, many nurses still prefer the traditional method.

Conclusion and Recommendation:

The nursing staff positively evaluated the E-learning as a method of training that drives learner engagement, motivation and success; however minority of the targeted population prefers traditional training methods.

Thus, based on the study results it is recommended to:

- Embrace E-learning modules built in house related to Nursing and direct patient care, to ensure optimization of benefits.
- Conduct additional studies on the E-learning and the obstacles hindering its effectiveness, in depth study on E-learning methods and its effect on the nursing staff performance and research efforts to improve features of E-learning environment.

Section 1. Factors affecting the utilization of the E-learning courses

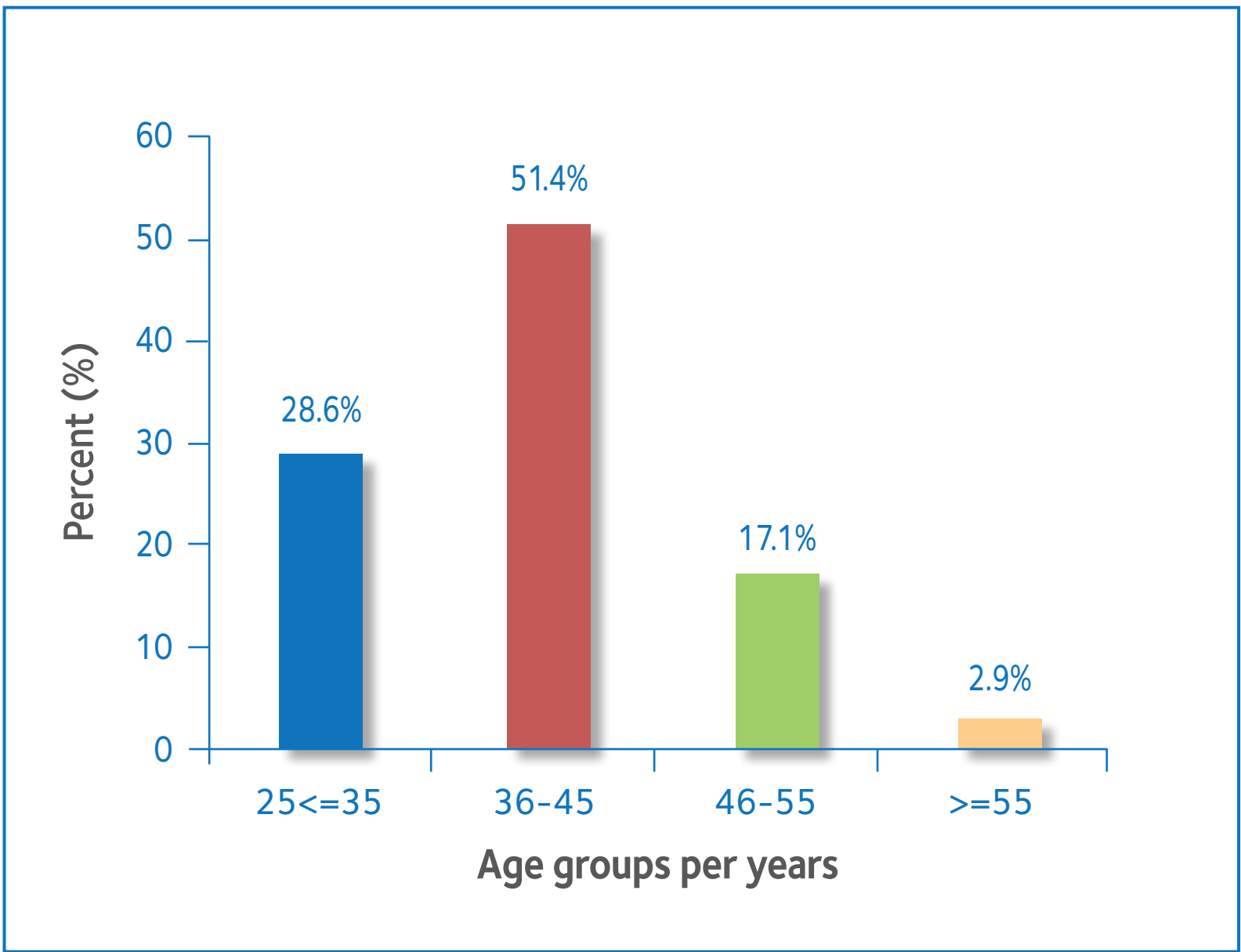


Figure 1. E-learning courses participant's age
Mean \pm SD 39.70 \pm 7.87

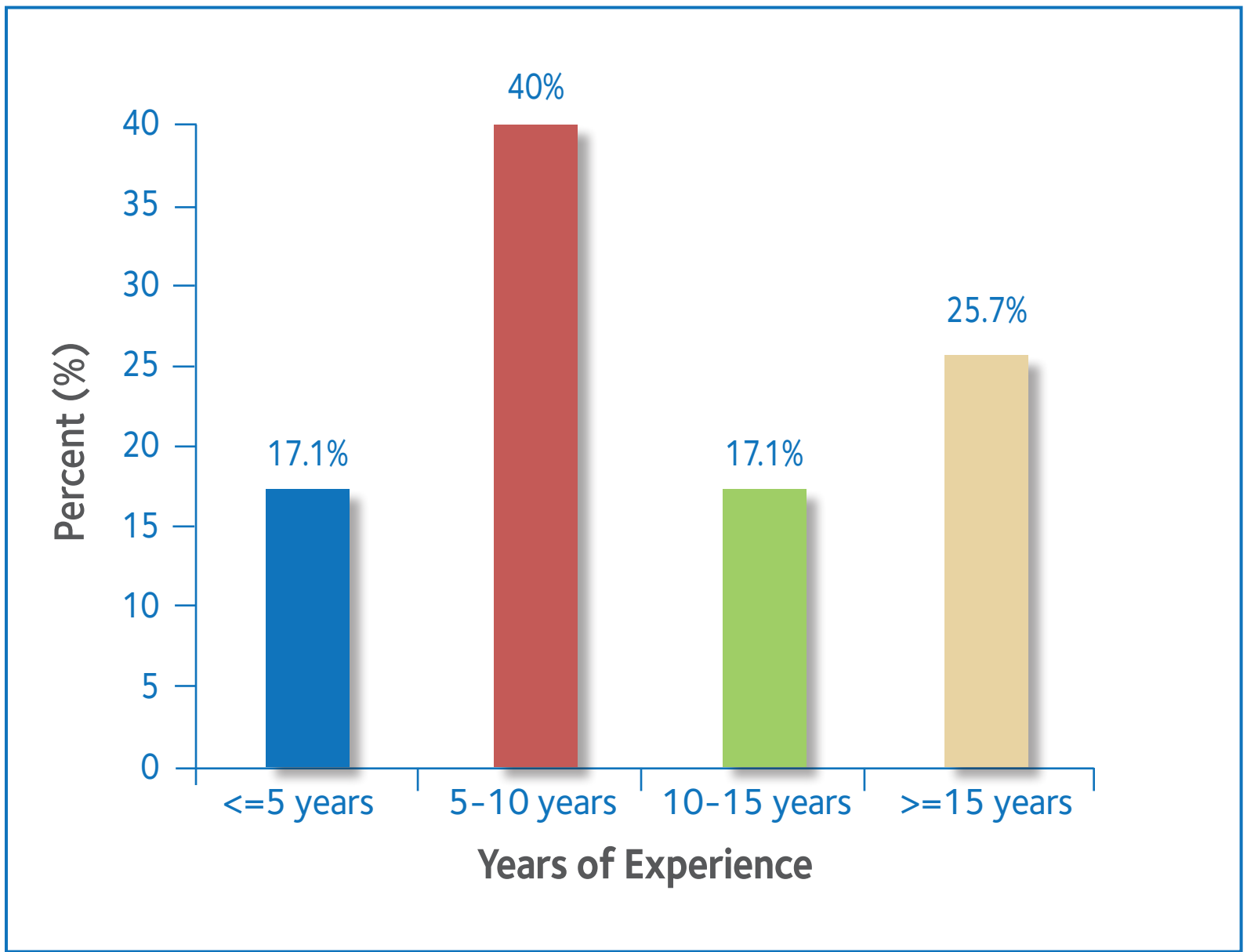


Figure 2. E-learning participant's years of experience
Mean \pm SD 10.00 \pm 6.43

Section 2. Factors affecting E-learning courses on participants' knowledge and practice

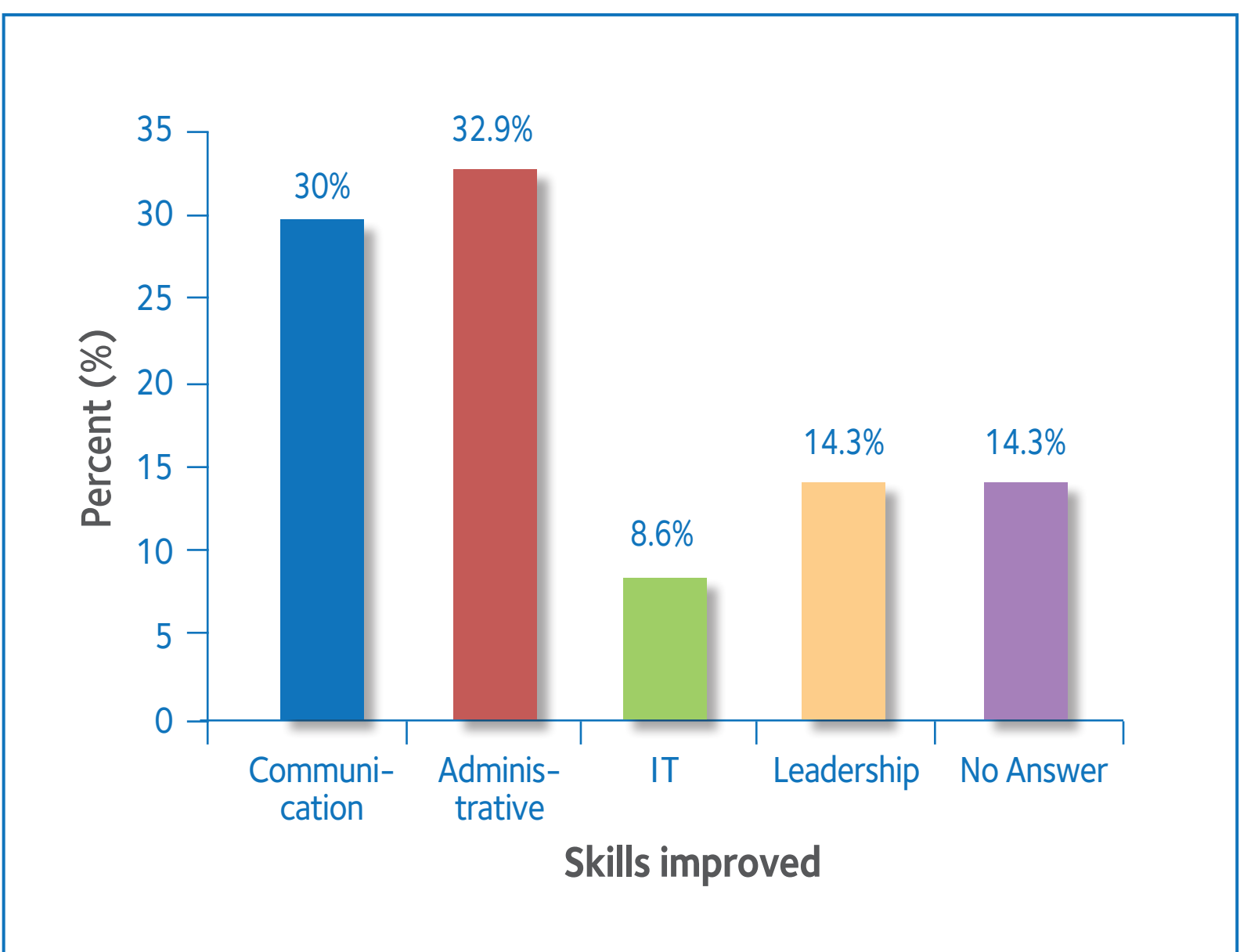


Figure 3. Skills improved through E-learning courses

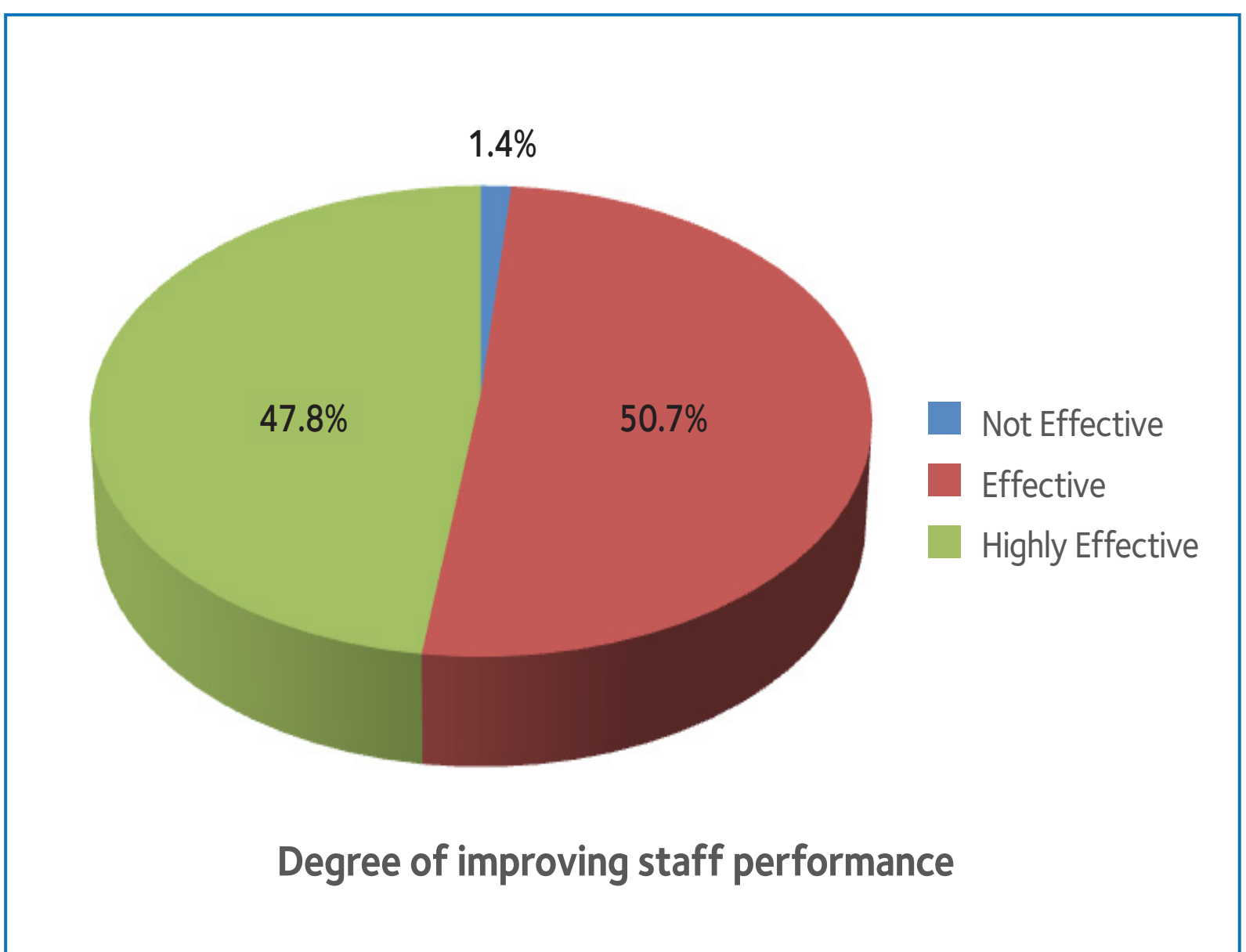


Figure 4. The effect of courses in improving performance in relation to nursing activities

Table 1. The methods of learning preferred by staff

Methods	Degree of Likeness n = 69		
	Disliked	Neutral	Most liked
1	2 (2.9%)	12 (17.4%)	55 (79.7%)
2	10 (14.5%)	19 (27.5%)	40 (58%)
3	2 (2.9%)	14 (20.3%)	53 (76.8%)
4	9 (13%)	26 (37.7%)	34 (49.3%)
5	8 (11.6%)	24 (34.8%)	37 (53.6%)
6	0 (0%)	6 (8.7%)	63 (91.3%)

The methods are:

Method 1: Face to face formal training course in groups delivered by the nurse educator.

Method 2: Face to face training from the nurse educator.

Method 3: E-learning courses.

Method 4: Workshops to work through alone with access to tutor if needed.

Method 5: E-library to work through alone with access to tutor if needed.

Method 6: Participation in workshops to get help on specific topics.

References:

- S. Kala, S. Isaramalai, A. Pohthong. Electronic learning and constructivism: A model for nursing education. Nursing Education Today, 2010.
- L. Taylor, PA. Abott, K. Hudson. E-learning for Health-Care Workforce Development. IMIA Yearbook of Medical Informatics 2008.

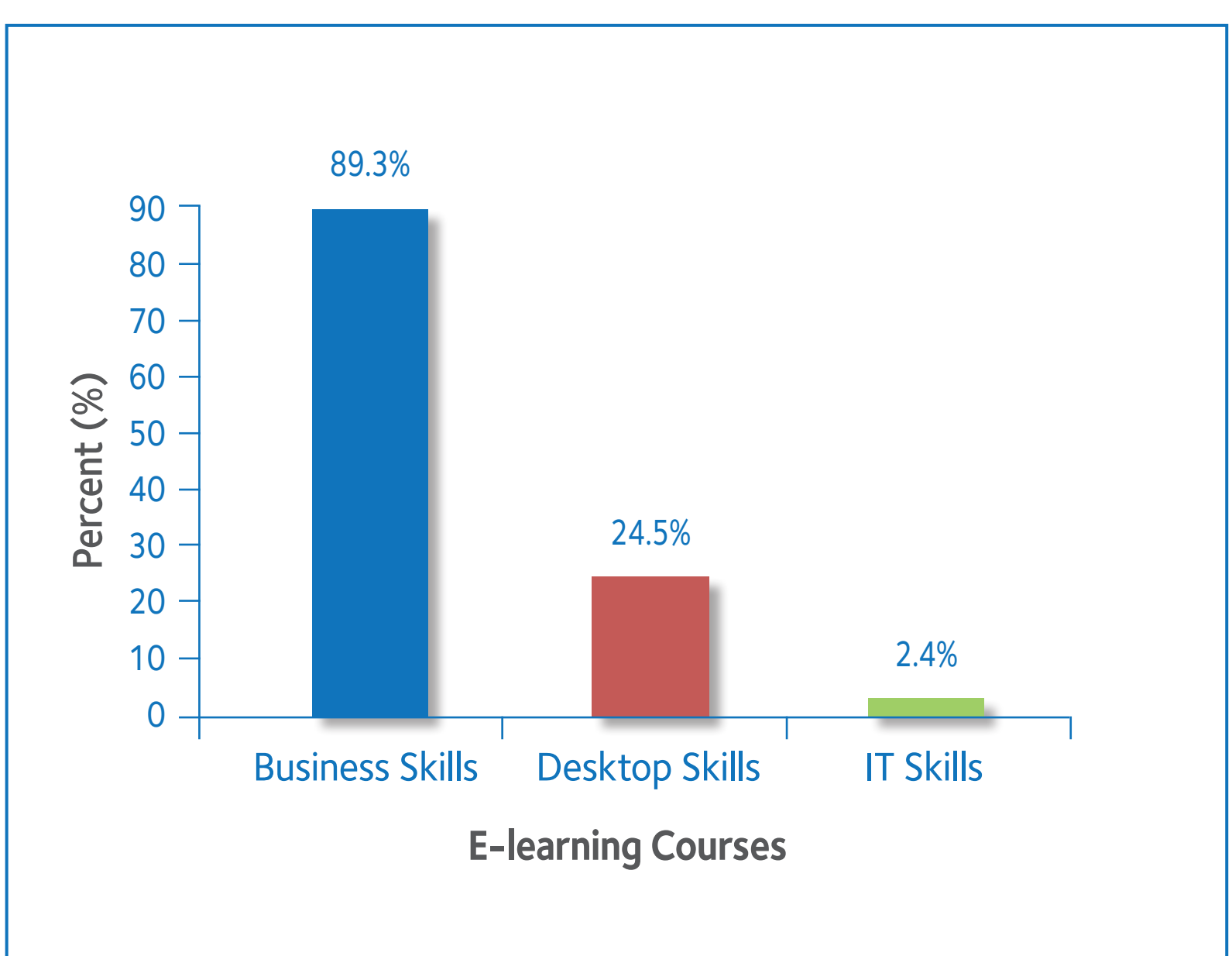


Figure 5. The course mostly accessed by the participants