

Multimedia Appendix 2: Results of Included Studies

Studies	Outcomes						
	Knowledge	Skill	Attitude	Satisfaction	Practice and Behavior change	Self-efficacy	Cost
Digital education versus usual learning							
Chaikoolvatana 2009 [36]	Knowledge of 5As ^a and case scenarios of smoking cessation counselling Post-test MCQ	-	-	-	-	Self-rated smoking cessation skill Questionnaire <i>Participants (73.34%) reported improvements in counselling skill</i>	-
Galal 2015 [37]	-	-	Attitude towards using teaching tool (SRS) Likert scale	-		-	-
Gordon 2013 [32]	-	-	Attitude towards training Likert scale	Satisfaction survey to assess website design, organization, and ease of use Likert scale	Change in behavior (sum of 4 factors - ask, assess, advice, and assist) Likert scale	Self-rated efficacy towards providing tobacco cessation interventions Likert scale	-

				<i>Higher satisfaction with the training</i>			
Young 2002 [29]	Knowledge of health effects of smoking Post-test MCQ	Smoking cessation techniques Likert scale <i>small improvements in intervention group</i>	-	-	Readiness to change (interest in changing current practice) Likert scale <i>no difference between two groups</i>	Self-assessed competence in smoking cessation advice Visual analog scale <i>Significantly higher self-efficacy in intervention group (p=.03)</i>	-
Blended education versus usual learning							
Butler 2013 [31]	-	-	-	-	-	-	Cost per practice £ 1597.40
Hymowitz 2007 [28]	-	Interviewing and tobacco intervention skill OSCE scores	-	-	Readiness to change (feeling prepared to help patients quit smoking) Survey	-	-
Ockene 2015 [34]	-	Tobacco treatment skill	-	-	-	Self-reported skill for behavior and	-

		OSCE scores				pharmacotherapy counselling Questionnaire <i>Higher self-efficacy in intervention group</i> (p<.05)	
Digital education versus digital education							
Bonewski 1999 [27]	-	Smoking status classification checklist	-	-	-	-	-
Stoner 2014 [33]	Knowledge of SBIRT core curriculum and motivational counselling Post-test MCQs <i>knowledge improvement with training</i>	-	-	Post-training satisfaction Questionnaire <i>Higher satisfaction with the training</i>	Clinical practice behavior change Likert scale <i>no difference between two groups</i>	Self-efficacy for counselling patients Likert scale <i>no difference between two groups</i>	-
Blended education versus digital education							
Brunette 2015 [30]	Knowledge about treating nicotine dependence Post-test Questionnaire <i>no difference between two groups</i>	-	Attitude towards video-conference sessions Post-test Questionnaire <i>no difference</i>	-	-	-	-

			<i>between two groups</i>				
Stolz 2012 [35]	Knowledge of health effects of smoking Post-test MCQ	Smoking cessation counselling skill OSCE scores	-	Post-training satisfaction Post-test MCQ		Self-rated smoking cessation counselling skill Questionnaire	-

Footnotes: ^a = ask, advise, assess, assist and arrange; OSCE = objective structured clinical examination; SMD = standardized mean difference; MCQ = multiple choice question; RR = Relative Risk