Table 2 Theme 1: articles/reports addressing planning and implementation of evaluation of new interventions (workshops, lectures, seminars, webinars, short courses, certificate programmes, educational videos)

Title	Author	Country	Intervention/study procedure	Major findings/conclusions	Kirkpatrick's level of evaluation
Use of short videos for faculty development in adaptation of interactive teaching strategies for virtual classroom	Ahmed et al., 2020 (13)	Egypt	20 short-format educational videos were created and shared through YouTube channel to help faculty progress in their adaptation to virtual teaching	300% increase in viewership with 9433 views reached in first 10 days. 236 viewers were satisfied whereas 4 did not find the videos very useful. Zoom breakout rooms, chat, poll/gaming functions were some of the methods recommended by the viewers	1
Assessing the impact of faculty development fellowship in Shiraz University of Medical Sciences	Ebrahimi et al., 2012 (14)	Iran (IR)	A teacher training programme in workshop format, covered effective teaching methods, feedback, knowledge assessment, and time management	85% of the participants were satisfied with the scientific content of the programme. The post-test scores of the intervention group were higher ($P < 0.001$) than the control group. The behavioural changes at the workplace were compared using ratings by their students before and after the programme.	1, 2, 3
Micro-feedback skills workshop impacts perceptions and practices of doctoral faculty	Baseer et al., 2020 (15)	Pakistan	Quasi-experimental design with a repeated measure, 2-group separate sample, pre- post-test model. A micro-feedback skills workshop to enhance feedback skills of doctoral supervisors using microteaching technique	The participants indicated a high level of satisfaction with the workshop. A learning gain of 56% was observed on pre–post objective structured teaching exercise scores. Self-selection bias, small sample size and non-blinding of the reviewers were some of the limitations.	1, 2
Satisfaction with 2-day communication skills course culturally tailored for medical specialists in Qatar	Bylund et al., 2017 (16)	Qatar	Implementation and evaluation of a 2-day communication skills training course covering 7 culturally adapted modules	Participants rated the module on breaking bad news as the most useful, and small group role-play as the most helpful course component. There was no significant association between previous experience and course outcome. It is recommended to use communication skills training developed by western countries with some cultural modifications.	1
Research methodology workshops evaluation using the Kirkpatrick's model: Translating theory into practice	Abdulghani et al., 2014 (17)	Saudi Arabia	Series of 5 research methodology workshops were conducted over 3 years and evaluated based on 4 levels Kirkpatrick model. Mixed method study.	Perception of satisfaction was mixed. The improvement in post scores across all the workshops were statistically significant ($P < 0.005$). Further follow-up showed that 56.9% started research and 6.9% published their research. Previous knowledge about research and other related factors were listed as confounding variables.	1, 2, 3, 4
Effect of faculty training programmes on improving quality of residency exams in 2013–2014	Derakhshan et al., 2015 (18)	Iran (IR)	Quasi-experimental study, conducted in 3 phases. Initially a learning resource along with MCQs were shared with 7 departments for evaluation, then feedback given based on evaluation followed by a separate workshop for each department.	Results showed a significant difference in evaluation of MCQs after the workshop ($P < 0.001$). faculty development programmes are very effective in facilitating good practices and need to be promoted.	1, 2, 3

Table 2 **Theme 1: articles/reports addressing planning and implementation of evaluation of new interventions (workshops, lectures, seminars, webinars, short courses, certificate programmes, educational videos)** *(continued)*

Title	Author	Country	Intervention/study procedure	Major findings/conclusions	Kirkpatrick's level of evaluation
Design, implementation, and evaluation of a medical education fellowship programme for the faculty members of Kerman University of Medical Sciences based on the Kirkpatrick Model	Dehghani et al., 2019 (19)	Iran (IR)	A 1-year fellowship programme in medical education for faculty members	Majority of the participants were satisfied with the programme and there was a significant increase in the knowledge of faculty members $(P < 0.05)$. A positive change was recorded in their behaviour. This study was from a single university with a small sample size and without a control group, which were documented as limitations.	1, 2, 3
The impact of skills education of presenting the effective feedback to the internist professors of Medical Sciences University of Birjand on the application of those skills in the clinical education by professors	Bazaz et al., 2015 (20)	Iran (IR)	A 6-hour workshop on the skills of providing feedback to medical students	Skill of providing feedback by professors, improved significantly $(P < 0.05)$ after the workshop, showing that training medical professors through faculty development workshops has a direct impact on their application during clinical education.	1, 2
An online academic writing and publishing skills course: help Syrians find their voice	Sabouni et al., 2017 (21)	Syria	Conducting and evaluating a low-cost online course using a hybrid teleconferencing and social media platform on academic writing and publishing	83% of the participants felt confident to write an academic paper and average student satisfaction was 8.4 out of 10. Heterogeneous population, lack of validated questionnaires and self-reporting bias were some of the limitations of this study.	1, 2
Establishing a blended learning programme through situated faculty development: experiences and reflections	Naseem et al., 2015 (22)	Pakistan	A blended learning programme (BLP) at a multi-campus university through a situated learning approach for faculty development.	Provision of professional development opportunities for faculty members in the form of teaching support and mentoring should be considered for development of a BLP. Availability of resources, dedicated faculty, preparedness of the institution and robust technology are the facilitating factors for successful implementation of BLP.	Data not available
Implementing a teaching and learning enhancement workshop at Aga Khan University: reflections on the implementation and outcomes of an instructional skills workshop in the context of Pakistan	Rodrigues et al., 2019 (23)	Pakistan	Initiation, implementation, and institutionalization of the teaching and learning enhancement workshop (TLEW) (a Canadian-based instructional skills workshop.	All participants strongly appreciated the role of TLEW in promoting engaged learning. On evaluation, the scores for reaction, learning, behaviour and results were 4.59 (SD 0.36), 4.34 (SD 0.41),4.35 (SD 0.46) and 4.30 (SD 0.55) respectively. However, many faculties stated that institutional support and recognition were crucial for active participation in TLEW.	1, 2, 3, 4
Faculty development for learning and teaching of medical professionalism	Al-Eraky et al., 2015 (24)	Saudi Arabia	Designing and evaluation of faculty development programme on learning and teaching professionalism in the Arabian context, using participatory design, in 3 steps: orientation workshop, vignette development, and teaching professionalism.	32 vignettes were developed, with a series of 7 questions/ triggers to guide students' reflection on professionalism. Students expressed that learning experience was enjoyable (mean 4.28, SD 0.81) and vignettes were authentic to real practice (mean 4.17, SD 0.82). Faculty felt that the programme was engaging, developed better vignettes and also transferred their learning to their workplace.	1, 2, 3
Residents as professionalism teachers and assessors; a pilot study on implementing a faculty development programme leading to Curriculum Development	Ismail et al., 2017 (25)	Saudi Arabia	faculty development programme in professionalism (definition, attributes, teaching methods and assessment of professionalism) for medical residents was delivered through blended mode (workshop, interactive lecture, online videos and reading materials)	Satisfaction index was 95%. More than 75% of the residents expressed that they were never exposed to any activity about professionalism' teaching and assessment, before this intervention. Periodic review, feedback analysis and evaluation were recommended on a regular basis.	1

Table 2 Theme 1: articles/reports addressing planning and implementation of evaluation of new interventions (workshops, lectures, seminars, webinars, short courses, certificate programmes, educational videos) *(concluded)*

Title	Author	Country	Intervention/study procedure	Major findings/conclusions	Kirkpatrick's level of evaluation
Investigating the effect of teaching aesthetic skills to faculty members on development of their effective teaching performance	Eslamian et al., 2017 (26)	Iran (IR)	Quasi-experimental study with 2-group pre- post-test design. Investigated the effect of teaching aesthetic skills to faculty members.	Paired *t*-test showed significant increase in mean effective teaching scores, in the experimental group. Applying aesthetic skills by faculty members is shown as a way of promoting their effective teaching performance. Therefore, faculty members are recommended to develop knowledge and skills to utilize aesthetic skills in the teaching process.	1, 2
Development and evaluation of an online course about the social accountability of medical schools	Abdalla et al., 2019 (27)	Saudi Arabia	A 4-module course was developed on social accountability and delivered online through the Moodle platform	75% of participants completed all modules. The discussion threads had a mean of 36 responses per module. All participants expressed that the course had a clear take-home message. The majority agreed the new concepts introduced in addition to correcting some of their misunderstandings. Time management and Internet were documented as main problems	1, 2
A virtual medical faculty development programme for remote teaching, pilot for replication	Hegazy et al., 2020 (28)	Egypt	An interventional prospective study to equip educators with technology competencies to conduct remote online learning through a virtual faculty development programme	81% of participants completed the programme and 80% were satisfied with the programme. The perceived increase ability of the participants to share and record video lectures after the virtual faculty development programme was highly significant ($P < 0.001$). The limitations were that it was single centre study, and an extended evaluation was needed to study the impact of intervention.	1
Tailoring online faculty development programmes: overcoming faculty resistance	Ahmed, 2013 (29)	Egypt	A novel training approach where faculty members were given the choice of using web-based modules, and email-based discussion forums to promote self-directed learning	Faculty benefited and were satisfied with the training. Faculty showed resistance to learning when they were moved away from their comfort zone. Ensuring a safe learning environment to study at their own pace and place was more acceptable than mandating faculty development training. Opinion of an external expert was considered a valuable tool to minimize resistance.	1
Online faculty development using cognitive apprenticeship in response to COVID-19	Eltayar et al., 2020 (30)	Egypt	A stepwise approach with video recording on MCQ design, followed by coaching in small groups was done, and finally, learners were asked to create new MCQs and send them via email for further feedback	"Reflection", "articulation" and "exploration" of previously constructed MCQs resulted in better MCQs post-workshop. Proper hands-on design, providing options that suit trainees' preferences, giving feedback and scaffolding can produce satisfactory learning even during online sessions.	1, 2
YouTube videos as a tool for faculty development in medical education: A learning analytic overview.	Hassanien et al., 2018 (31)	Saudi Arabia	Using video-based lectures as a tool for faculty development	Video-based lectures can be considered a valuable tool in FD. Shorter video-based lectures show higher audience retention. Synchronous interaction during the lectures should be considered for greater effectiveness and audience retention.	1
Scientific writing: hands-on workshop analysis among the faculty of medical sciences	Khan et al., 2020 (32)	Pakistan	Cross-sectional analytic study to conduct a faculty development workshop, with pre- and post-workshop assessment	A significant difference was detected between the of knowledge of participants before and after the workshop	1, 2
The effect of interactive and effective lecturing workshop for developing faculty members in teaching: an experiment of utilizing peer observation of teaching and feedback	Sadighpour et al., 2018 (33)	Iran (IR)	A descriptive study to design, implement and evaluate an interactive and effective lecturing workshop	Observing the performance, providing training opportunities, and providing feedback were effective to improve the quality of faculty development programmes in effective lecturing	1, 2, 3

FDP = faculty development programme,
MCQ = multiple choice question.