

## APPENDIX

**Table S1.** Pre- and post-test publications. Prospective or retrospective observational cohort studies without control-groups. Level of evidence 4.

Author	Educational tool	Assessment and statistical analysis	Facility	Participants	MERSQJ	Summarized study conclusion
Ackil et al. Use of hand-motion analysis to assess competence and skill decay for cardiac and lung point-of-care ultrasound. 2021 (1)	30 min class-based lecture (basic, cardiac and lung). Hands-on training with experts. 10 supervised examinations	Theoretical test: Image interpretation (pneumothorax) Practical test: Hand motion analysis + checklist Mann-Whitney and Wilcoxon test	Human models	36 paramedics (novices) + 6 physicians (experts)	10.5	Short didactic and hands-on training followed by supervision improves image interpretation and technical skills in lung ultrasound.
Batista et al. Lung ultrasound training for physiotherapists in 2 Brazilian ICUs-impact on knowledge gain. 2019 (abstract) (2)	Pre-reading followed by 1.5 h theory (lung) and 3 h hands-on training	Theoretical test Unknown t-test	Unknown	30 physiotherapists (intensive care)	10.5	A specific lung ultrasound training for physiotherapists in two Brazilian Intensive Care Units improved knowledge gain.
Boniface et al. A longitudinal Curriculum In Point-Of-Care Ultrasonography Improves Medical Knowledge And Psychomotor Skills Among Internal Medicine Residents. 2019 (3)	Longitudinal curriculum including 30 min class-based during morning report combined with 45-60 min small-group hands-on sessions in the afternoon.	Theoretical test: 30 MCQ/short answer before curriculum. 5 MCQ before/after each session. Practical test: Five sonographic tasks Paired t-test, Wilcoxon signed rank test. Session attendance: Pearson correlations coefficient.	Standardized patients and simulator	36 physicians (internal medicine)	12	A longitudinal curriculum improved the ability to accurately use and interpret POCUS. Higher attendance demonstrated greatest improvement on cumulative knowledge assessment.
Buhumaid et al. From novice to proficient: a longitudinal study of POCUS skill development through a hybrid certification program in the United Arab Emirates. 2025 (4)	Longitudinal POCUS curriculum. 7 web-based modules. Two day in-person training followed by practice in the clinic. Skill refresher as a two day hands-on. E-portfolio with 25 scans pr. Protocol. Longitudinal feedback.	Theoretical test: Quiz. Practical test: UCAT score and image quality of submitted protocols. ANOVA and linear mixed effect	Standardized patients	12 physicians (anesthesia, emergency medicine, general practice and neonatology)	12	The one-year program led to significant improvement in objectively measured competency. Learning curves suggested a plateau between 15-18 assignments and suggests this as a threshold for achieving basic proficiency.

Tables S1 (Continued)

Author	Educational tool	Assessment and statistical analysis	Facility	Participants	MERSQI	Summarized study conclusion
Choi et al. Zombie Cruise Ship Virtual Escape Room for POCUS Pulmonary: Scan your way Out. 2022 (5)	45 min small group case-based and team-based distance learning	Theoretical test 15 MCQ Mean and median	Videoclips	23 physicians (emergency medicine residents)	9	A team-based learning experience improved knowledge and held participants engaged.
Cohen et al. Bedside diagnostic ultrasound for internal medicine residents – a medical education initiative. 2019 (abstract) (6)	30 min bedside sessions x 2 (lung and cardiac)	Theoretical test Image interpretation Fisher's exact test	Admitted patients	23 physicians (internal medicine residents)	10	A brief, interactive, bedside workshop during rotation led to significant improvements in comfort and knowledge of lung ultrasonography
Davila-Roman et al. Ultrasound core laboratory for the Household Air Pollution intervention network trial: Standardized training and image management for Field Studies Using Portable Ultrasound in Fetal, Lung, and Vascular Evaluations. 2021 (7)	Pre-training webinar on basics and protocols. 2 week curriculum with class-based and hands-on (lung/vascular and fetal)	Theoretical test 25 MCQ Hands-on test Paired t-test	Live healthy participants	18 sonographers	11	The curriculum aimed to ensure accurate and reproducible ultrasound measurements in clinical research.
Demetrio et al. Lung ultrasound teaching in medical education: a pilot study at a Brazilian medical school. 2024 (8)	Pre-reading of two articles. One 2 h class-based lecture followed by 90 min hands-on lecture.	Theoretical test: 22 questions. Practical test: Technique, accuracy and interpretation, pathology recognition. Students t-test and ANOVA	Unknown	42 medical students (4 <sup>th</sup> and 11 <sup>th</sup> semester)	10.5	Theoretical and practical training improves cognitive performance.
De Souza et al. Implementation and assessment of Lung Ultrasound Training Curriculum for Physiotherapists with a Focus on Image Acquisition and Calculation of an Aeration Score. 2022 (9)	Pre-training 1 h 15 min webinar on basic and lung ultrasound followed by 5.5 h combined class-based and hands-on. 10 examinations on real patients first ones supervised.	Theoretical test 30 MCQ Practical test Image quality assessment and agreement between trainees and supervisors. Friedman and Wilcoxon signed-rank test	Mannequin simulator, hospitalized patients	13 physiotherapists	11.5	A blended-learning lung ultrasound course led to an increase in the degree of acquisition and retention of knowledge and skills by physiotherapists.
Dixit et al. Assessing the Efficacy of a Point-Of-Care Ultrasound Curriculum Delivered Via a Two-week elective. 2024 (abstract) (10)	Small group class-based session, directly observed hands-on training and image interpretation discussions.	Theoretical: Image interpretation test Percent of correct answers.	Hospitalized patients	21 physicians (internal medicine)	9	After two-week elective image acquisition was statistically improved.

Author	Educational tool	Assessment and statistical analysis	Facility	Participants	MERSQI	Summarized study conclusion
Ferre et al. Piloting a Graduate Medical Education Point-of-Care Ultrasound Curriculum. 2022 (11)	Web-modules (basic and lung) followed by 1 h hands-on lab (17/24 participated)	Theoretical test 10 MCQ Wilcoxon rank sum tests	Unknown	24 physicians (internal medicine, emergency medicine, family medicine, pediatrics)	10	A combination of asynchronous online content and hands-on instruction is feasible
Gasho et al. Impact of a lung ultrasound course for rheumatology specialists (IMPACT-2). 2019 (12)	4 h combined course with class-based didactics and including 45 min hands-on and 30 min pathology recognition (images)	Theoretical test 22 questions and practical OSCE with 30 checkpoints + four simulation scenarios Students t-test and ANOVA test	Live models and simulation	8 physicians (rheumatology)	10	The course led to measurable improvement in written knowledge and acquisition to obtain adequate images.
Good et al. Point-of-care ultrasound Education for Pediatric Residents in the Pediatric Intensive Care Unit. 2018 (13)	3 x 15 min web-modules (basic, heart and lung) followed by 1 h bedside hands-on training. Observed 2 x POCUS rounds	Theoretical test MCQ Mean and interquartile range	Admitted patients	6 physicians (pediatrics)	9	A basic POCUS curriculum can be instituted during the pediatric intensive care unit rotation and improve resident knowledge
Greenstein et al. Effectiveness of a Critical Care Ultrasonography Course. 2017 (14)	3-day course (Critical care ultrasound). 1.5 h class-based on basic and lung ultrasound followed by case-based image interpretation and hands-on sessions.	Theoretical test 20 video-based questions Practical test (87/363) Mean and standard deviation	Live models	363 physicians and advanced practice nurses	11.5	The course is an effective method to train large groups of clinicians and improve image interpretation and hands-on skills
Grewal et al. Point-of-Care Ultrasound Curriculum for Internal Medicine Residents During the COVID-19 Era: A pilot Study. 2022 (15)	30 min online lectures on different topics combined with 1:1 bedside hands-on during rounds	Theoretical test (Image interpretation) 18 MCQ McNemar's chi-squared test	Admitted patients	12 physicians (internal medicine)	9	The curriculum improved residents' confidence but not image interpretation skills
Grubic et al. Training of Non-expert Users Using Remotely Delivered, Point-of-Care Tele-Ultrasound: A Proof-of-Concept Study in 2 Canadian Communities. 2023 (16)	2-3 h web modules (basic, lung and cardiac) followed by self-training. 1 h virtual workshop on practical skills. On-call teleguidance for two weeks.	Practical test Evaluation during teleguidance on acquisition, quality and interpretation Wilcoxon signed rank test	Admitted/ out of clinic patients	12 physicians (remote setting)	12.5	Lung/pleura ultrasound skills can be taught successfully to novice learners using entirely virtual, live-streamed method
Haghighat et al. Development and Evaluation of Resident-Championed Point-of-Care Ultrasound Curriculum for internal Medicine Residents. 2021 (17)	1 h class-based followed by 3 h hands-on training delivered by resident champions	Theoretical test 10 MCQ Unknown t-test	Volunteer colleagues	32 physicians (internal medicine)	10	A resident-championed POCUS curriculum is feasible and improves knowledge among internal medicine residents

Author	Educational tool	Assessment and statistical analysis	Facility	Participants	MERSQI	Summarized study conclusion
Herrera et al. Implementation of an International Severe Infection Point-of-Care Ultrasound Research Network. 2023 (18)	Remote or in-person session (basic and lung) followed by 50 studies with tele-education ('Reacts' on Lumify systems)	Theoretical test image interpretation Practical test OSCE (no results) Image quality first 25 vs. second 25 scans Proportion	Admitted patients	49 sonographers	9.5	POCUS trainees from a variety of professional backgrounds could be trained to successfully perform lung ultrasound
Karakala et al. Point of care echocardiography and ultrasound-guided volume assessment training for nephrologists and trainees to teach point of care echo skills. 2017 (abstract) (19)	8 h workshop (cardiac and lung) hands-on training with demonstration of technic and supervision.	Theoretical test 6 MCQ about lung and parenchymal volume assessment Proportion and standard deviation	Standardized patients	20 physicians (nephrology)	10	The training can improve bedside volume assessment skill
Kim et al. A city-wide geriatric oriented point-of-care curriculum during geriatric fellowship. 2023 (20)	Longitudinal curriculum. Five workshops (basic, DVT, bladder, lung and cardiac). Two hands-on scans. Three optional workshops with hand-on opportunity and clinical scenarios.	Theoretical test after basic workshop and after entire curriculum. 20 MCQ Practical test OSCE (Image interpretation and acquisition) One-way analysis of variance	Standardized patients	8 physicians (geriatric)	11	A successful inter-fellowship collaboration where all fellows improved their knowledge (and confidence)
Leibenguth et al. Implementation of pulmonary ultrasound training for critical care advanced practice providers. 2019 (21)	4 h lectures, case studies and hands-on about pulmonary ultrasound	Theoretical test 23 MCQ Practical test Wilcoxon signed rank test and pearson correlation	Live volunteer models, manikins and pulmonary US trainer devices	11 Nurses/ Advanced practice providers (critical care)	10.5	The course demonstrated improvement in knowledge and use after formal training
Lim et al. Can limited Education of Lung Ultrasound Be Conducted to Medical Students Properly? A Pilot Study. 2017 (22)	3 h training course consisting of 1 h class-based and 2 h hands-on	Theoretical test 40 video-based questions Practical test checklist Paired t-test	Healthy live volunteer	40 medical students	10	Limited lung ultrasound education improves medical students' knowledge, image acquisition and interpretation ability
Liu et al. A quality improvement initiative to standardize thoracic ultrasound training for respiratory healthcare providers. 2018 (abstract) (23)	4 h combination of class-based and hands-on training	Theoretical test 9 image/video-based questions Proportion	Unknown	16 Physicians and 2 nurses (respirology, palliative care, thoracic oncology)	9	A brief course consisting of didactic and hands-on improved basic interpretative skills

Author	Educational tool	Assessment and statistical analysis	Facility	Participants	MERSQI	Summarized study conclusion
Luckey-Smith et al. Is E-Learning Education Effective in Increasing the Ability of Nonphysician Medical Flight Crewmembers to Accurately Interpret Point-of-Care Lung and Cardiac Ultrasound Examinations? 2021 (24)	1 h 15 min Pre-reading material (video, podcast and blogs) on normal lung. Additional web-based material 1 h 30 about normal heart.	Theoretical test 14 MCQ (lung and cardiac) Paired sample t-test	None	26 (18 flight nurses or 8 flight paramedics)	11	This online source, improves the ability to interpret basic lung ultrasonography. If integrated into training more time can be allotted for hands-on training
Lum et al. Integration of lung point-of-care ultrasound into clinical decision making for medical students in simulated cases. 2021 (25)	12 weeks longitudinal curriculum implemented into acute care block: Lectures and hands-on scanning. High fidelity simulation with the OPTION to perform ultrasound.	Theoretical test after didactic but before simulation and after simulation. OSCE during simulation Paired two sample for means t-test	Live standardized patients (no pathology)	50 medical students	10	Students were able to acquire POCUS-related knowledge after a brief didactic session but struggled to apply this knowledge in simulated clinical scenarios
Luo et al. Lung Ultrasound Training for Respiratory Therapists. 2025 (26)	Training session repeated at 6 to 9-month intervals. 1 h 30 min class-based and 1h 30 min hands-on training.	Theoretical test 20 questions Wilcoxon signed rank test	Live healthy models and simulator	23 respiratory therapists (critical care)	10	Didactic followed by hands-on training effectively improved lung ultrasound knowledge. A significant decrease was observed after 6-9 months.
Maloney et al. Utility of different lung ultrasound simulation modalities used by paramedics during varied ambulance driving conditions. 2021. (27)	45 min lecture on lung ultrasound followed by 25 supervised examinations	Theoretical test 25 questions Scanning proficiency practical exam Paired students t-test	Healthy volunteer and simulation software	17 paramedics (3 emergency physicians post-test for content validation)	10	After short training paramedics recognition and interpretation of lung ultrasound images improves and suggest that existing simulation software can be used
Milius et al. Development of hands-on skills in diagnostics of lung diseases using ultrasonography in undergraduate medical education. 2023. (28)	Three semesters of ultrasound with supplemental COVID-19 course: Lecture followed by live demonstration	Theoretical test 10 question Wilcoxon signed rank test	BLUE phantom	31 medical students (osteopathic)	9	Medical students improved in understanding of lung ultrasonography after the training session
Mongodi et al. Lung ultrasound training: How short is too short? Observational study on the effects of a focused theoretical training for novice learners. 2024 (29)	Three class-based lectures each 30 min (general, b-lines, lung sliding)	Theoretical test 2x25 videos Wilcoxon signed rank test	None	22 nurses (critical care)	11	A short focused training significantly improved recognition of B-lines and lung sliding. Lung sliding may require a longer training

Tables S1 (*Continued*)

Author	Educational tool	Assessment and statistical analysis	Facility	Participants	MERSQI	Summarized study conclusion
Moro et al. Validation of the performance of “fast lung ultrasound teaching program” for gynecologists/obstetricians dealing with pregnant women with suspicion of covid-19 infection: An Italian prospective multicenter study. 2021. (30)	40 min lecture on basic ultrasound and lung.	Theoretical test 10 questions with ultrasound clips  Wilcoxon signed rank test	None	108 physicians (gynecology/obstetrics)	13	A possible model for implementing ultrasound education
Mousa et al. Effectiveness of lung ultrasound training in intensive care unit staff (TRAINER). A prospective multicenter observational cohort study. 2023. (abstract) (31)	Two h training program	Theoretical test 15 images  Wilcoxon signed rank test	Unknown	47 physicians (intensive care)	11	After a two hour training program 50% of intensivists were able to correctly identify 80% of ultrasound images
Mousa et al. Targeted, Condensed Lung Ultrasound Training Program for Image Interpretation: A Prospective Multicenter Observational Study in Intensive Care Unit Professionals. 2025 (32)	One hour class-based lecture followed by 1 h hands-on training	Theoretical test 20 MCQ video clips  McNemars test and paired Wilcoxon test	Hospitalized patients	63 physicians and 3 nurses	13	A short training may be sufficient to achieve competencies in lung ultrasound.
Ntoumenopoulos et al. Evaluation of a pilot programme on diagnostic thoracic ultrasound curriculum for acute care physiotherapists. 2017 (33)	Pre-reading followed by a 1-day course: 2.5 h class-based lectures and 4 h hands-on.	Theoretical test 10 MCQ (pre) 21 MCQ (post)  Mean and standard deviation	Simulation mannequin	12 physiotherapists (acute care)	10	A single day course led to improvement in knowledge but minimum training requirements are still unclear
O'Connor et al. A Novel point-of-care ultrasound curriculum for air critical care personnel. 2023 (34)	Four x 1 h didactic lectures (in person or video) (ultrasound theory and equipment, chest wall/pneumothorax, FAST, image review) 2-3 x 2 h hands-on training followed by 25 examinations with possible supervision.	Theoretical test 30 min combined written and MCQ  Mean and paired t-test	Standardized patients in simulation setting	Critical care paramedics or nurses (helicopter emergency medical service)	9	The results suggest that the curriculum is feasible and effective in preparing helicopter emergency medical service personnel performing and interpreting eFAST exams

Author	Educational tool	Assessment and statistical analysis	Facility	Participants	MERSQI	Summarized study conclusion
Pan et al. Efficacy of a two-week ultrasound elective in knowledge acquisition and retention of thoracic ultrasonography among internal medicine residents. 2019 ( <i>abstract</i> ) (35)	Two-week ultrasound elective followed by 1 h case-based simulation workshops with lecture and hands-on every 6-week.	Theoretical test	Unknown	102 physicians (internal medicine) 24/102 had participated in a US elective before.	10	A two-week curriculum prior to longitudinal workshops increases ultrasound knowledge. Physicians with prior ultrasound courses perform better on test scores both pre- and post assessment.
		Unknown t-test				
Parker et al. Developing a roadmap for a competency-based point of care ultrasound education program. 2025 (36)	Two weeks POCUS elective: 15-20 h class-based (cardiac, lung and abdominal), 8-10 h bedside instructions and self-learning with access to online materials.	Theoretical test 10 MCQ (lung) Practical test ACEP-CORD	Hospitalized patients	21 physicians (anesthesiology)	11.5	The elective did not lead to knowledge gain.
		Paired t-test				
Patel et al. Effect of lung ultrasound didactics on trainees' Interpretation of lung sonograms. 2024 ( <i>abstract</i> ) (37)	Before intervention: 3 h lung ultrasound material. Intervention: Group-iterative class-based training med image interpretation of 10 images every week for four weeks.	Theoretical test: Image interpretation accuracy compared to expert	Video material	4 sonographers (radiology)	10	The intervention improved agreement among sonographers and improved accuracy for consolidations not A-lines, B-lines, pleural thickening or pleural effusions.
		Bland-altman plot				
Pradhan et al. A novel blended learning course on ultrasound for rapid assessment of acute respiratory failure. 2017 ( <i>abstract</i> ) (38)	1-day combined class-based, case-based lectures and hands-on in small groups	Theoretical and image interpretation test	Unknown	15 physicians (pulmonary/critical care)	9	The 1-day course resulted in improvement in knowledge, image acquisition and image interpretation skills
		Median and interquartile range				
Pradhan, Kwok et al. POCUS for pulmonologists: Fellow-designed longitudinal point-of-care ultrasound course crafted through four component instructional design. 2023 ( <i>abstract</i> ) (39)	7-month longitudinal POCUS curriculum. 1 session lung/pleural and respiratory failure (out of 7)	Theoretical test 25 MCQ Behavioral OSCE	Unknown	10 physicians (pulmonology)	10	A longitudinal POCUS training course for pulmonologists using 4C/ID improves knowledge and image acquisition
		Wilcoxon matched pairs signed-rank test				
Press et al. Evaluation of a training curriculum for prehospital trauma ultrasound. 2013 (40)	One day course. 2 h class-based (20 min lung) and 4 h hands-on training followed by weekly webmodules and a 1 h review session.	Theoretical: 25 questions Practical: OSCE (post)	Model and hospitalized patients	33 Helicopter paramedics and flight nurses	11	Training incorporating didactics, e-learning and hands-on was feasible and successful.
		Paired t-test				

Tables S1 (*Continued*)

Author	Educational tool	Assessment and statistical analysis	Facility	Participants	MERSQI	Summarized study conclusion
Rappaport et al. Implementing a 3 year, longitudinal point of care ultrasound curriculum in a internal medicine residency program. 2024 (41)	Pre-reading (textbook and online modules) followed by class-based and hands-on sessions	Practical test: Image acquisition skills (OSCE lung sliding and A-lines) McNemar's test	Healthy male volunteers	62 physicians (internal medicine)	11	The longitudinal curriculum is feasible and effective to improve image acquisition skills
Reisinger et al. Renal fellows' point-of-care lung ultrasound curriculum. 2017 (abstract) (42)	Didactic learning (web/app-based) followed by hands-on with remote feedback on image quality	Theoretical test Paired two sample means t-test	Unknown	Physicians (nephrology)	10	Quantification of lung water by B-line score can be quickly combining web solution and hands-on
Sabnani et al. A longitudinal Evaluation of a multimodal POCUS curriculum in pediatric residents. 2023 (43)	2 h session with class-based followed by hands-on. Protocol specific sessions 45 min + hands-on.	Theoretical test 25 Video clips with MCQ Student's t-test	Live models	12 Physicians (pediatrics)	10	The curriculum led to improvement in knowledge among pediatric residents
Schott et al. Retention of point-of-care ultrasound skills among practicing physicians: Findings of the VA National POCUS Training Program. 2021 (44)	2.5 day training curriculum. 1 h class-based and 1 h hands on lung ultrasound training.	Theoretical test 30 MCQ Practical test (image acquisition and interpretation) Paired t-test	Standardized models	127 physicians (department of veteran affairs)	12	The curriculum improved knowledge and skills when performing lung ultrasound
Sekiguchi et al. A general Critical care ultrasonography workshop: Results of a novel Web-based learning program combined with simulation-based hands-on training. 2013 (45)	Before intervention: 4 x 30 min web-based didactics. Intervention: Two hours skills training (thoracic and vascular) with discussion and feedback.	Theoretical: 43 MCQ Practical: OSCE 28 points Paired t-test	Unknown	16 physicians (critical care)	10	Web-based learning and hands-on simulation significantly improved knowledge and technical skills.
Shitrit et al. Continuing professional development for primary care physicians: A pre-post test study on lung point-of-care ultrasound curriculum. 2024 (46)	4.5 h web-based didactic on basics and LUS. 6 h hands-on in two parts with self-training in between.	Theoretical: Image interpretation Practical examination. Paired t-test and Wilcoxon signed rank test	Simulator and live patients.	50 physicians (general practice)	12.5	Participants gained proficiency in the use of LUS.

Author	Educational tool	Assessment and statistical analysis	Facility	Participants	MERSQI	Summarized study conclusion
Tai et al. A novel comparison of lung point of care ultrasound (POCUS) interventions: An introspective review of POCUS curriculum. 2024 (abstract) (47)	Intervention 1: Two week POCUS elective. Daily small group class-based followed by hands-on with real time feedback Intervention 2: Simulation centre small group 30 min lecture on thoracic ultrasound followed by 30 min case-based scenario.	Theoretical: Image interpretation Paired t-test	Unknown	X Physicians	10.5	Both interventions delivered lung ultrasound content to learners effectively.
Tivendale et al. Multimodal Lung and Sternal ultrasound Education program for cardiothoracic nurses and physiotherapists. 2021 (48)	10 h online learning followed by 3 h hands-on and 6 mentored examinations. 20 required logbook examinations.	Theoretical test practical test (image acquisition). Pre-test after online compared to after hands-on. Mean and standard deviation	Simulator and hospitalized patients	51 nurses and physiotherapists	9	Education for nurses and physiotherapists that includes mentored rounds facilitates translation of knowledge and skills into practice
Vallangca et al. Structured point-of-care ultrasound training for critical care advanced practice providers. 2023 (abstract) (49)	Web-based courses combined with monthly hands-on sessions (FAST, cardiac, pulmonary, vascular and abdominal)	Theoretical test MCQ Practical test (checklist) Wilcoxon signed rank test	Unknown	11 Advanced practice providers (critical care)	10	After the course there was a decrease in knowledge based on MCQ but increase in practical skill performance in lung ultrasound
Wang et al. Novel 4W (When-Where-What-What) Approach of Training Point-of-Care Ultrasound (POCUS) Application in Resuscitation With High-Fidelity Simulator. 2020. (50)	Participants who already have received POCUS training receives simulation training with a cardiac arrest case.	Practical test (assessment of integration of POCUS into resuscitation) Paired t-test	Simulation	23 physicians (anesthesia)	10.5	The approach is effective on proficiency and participant are more likely to use POCUS in the future
Wanjiku et al. Assessing a novel point-of-care ultrasound training program for rural healthcare providers in Kenya. 2018. (51)	Participants who already had participated in the sites POCUS program but no other programs and used POCUS in their everyday were retention tested. The curriculum consisted of web-based theory, 1 day hands-on and volunteer refresher sessions.	Theoretical test 30 MCQ Practical test (OSCE FAST and thoracic) Paired t-test	Healthy volunteers	32 trainees (rural setting)	9.5	Ongoing training and opportunities for hands-on training is relevant in a rural setting

Author	Educational tool	Assessment and statistical analysis	Facility	Participants	MERSQI	Summarized study conclusion
Wenger et al. Department-based bedside ultrasound training feasibility and assessment of barriers and utilization. 2018 ( <i>abstract</i> ) (52)	Two days department based bedside ultrasound course	Unknown Mean and significance	Unknown	29 physicians (pediatric critical care)	10	The curriculum led to improvement in knowledge
Xin et al. Role of 2-day critical ultrasound training curriculum in guiding clinical activities in China. 2024 (53)	Two-day critical ultrasound training basic knowledge (lung and cardiac) and hands on training	Theoretical test (image interpretation) practical test (image acquisition and application ability) Means and standard deviation	Unknown	792 physicians	11	The physician's ability to assess critical ill patients with ultrasound improved after a two day training course

MCQ = Multiple-choice question, POCUS = point of care ultrasound, OSCE = Objective structured clinical examination, DVT = Deep vein thrombosis, BLUE = Bedside lung ultrasound in emergency, FAST = Focused assessment with sonography in trauma, UCAT = Ultrasound Competency Assessment Tool, ACEP-CORD = American College of Emergency Physicians – Council of Residency Directors.

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