For this study, 2 separate interfaces for the participants were created on the SurveyMonkey platform (Momentive Inc). The participants were students of Master’s university health sciences studies in Croatia. It has been shown that better knowledge and more positive attitudes toward EBM among medical students are associated as a strong basis to design new, original research studies that will fill the gaps and answer relevant and unsolved clinical questions. It has been shown that better knowledge and more positive attitudes toward EBM among medical students are associated with the exposure to the vertical subject on research in biomedicine and activities of The Cochrane Collaboration.

There were 8 eligible institutions in Croatia for this study, and we invited all of them. Students from eligible institutions were contacted via email by coauthors (MC, MN, KI, DA, NS, SZ, and SM) employed in these institutions and invited to participate in the study on brief web-based education about SRs of the literature.

"Knowledge of SRs in trainees can help not only in developing useful skills in critical appraisal but also in addressing important clinical questions and serve as a strong basis to design new, original research studies that will fill the gaps and answer relevant and unsolved clinical questions." We conducted an RCT with 2 parallel groups and 1:1 participant allocation. There were no important changes to methods after trial commencement. The participants were students of Master’s university health sciences studies in Croatia.

It has been shown that better knowledge and more positive attitudes toward EBM among medical students are associated with the exposure to the vertical subject on research in biomedicine and activities of The Cochrane Collaboration.

"Knowledge of SRs in trainees can help not only in developing useful skills in critical appraisal but also in addressing important clinical questions and serve as a strong basis to design new, original research studies that will fill the gaps and answer relevant and unsolved clinical questions."

There were no important changes to methods after trial commencement. The educational intervention was written in the Croatian language. It consisted of 11 short educational texts on the methodology of producing SRs. The educational intervention was written in the Croatian language. It consisted of 11 short educational texts on the methodology of producing SRs. It was presented to the participants in 11 separate sections to be as similar as possible to the number and form of the educational texts in intervention group A. It was presented to the participants in 11 separate sections to be as similar as possible to the number and form of the educational texts in intervention group A.

There were no important changes to methods after trial commencement. The educational intervention was written in the Croatian language. It consisted of 11 short educational texts on the methodology of producing SRs. The educational intervention was written in the Croatian language. It consisted of 11 short educational texts on the methodology of producing SRs. It was presented to the participants in 11 separate sections to be as similar as possible to the number and form of the educational texts in intervention group A. It was presented to the participants in 11 separate sections to be as similar as possible to the number and form of the educational texts in intervention group A.
**RESULTS**

The primary outcome was the difference in the percentage of correct answers per participant in the postintervention questionnaire between intervention groups A and B.

Secondary Outcomes were the difference in the number of correct answers per participant in the postintervention questionnaires for the educational intervention group and the proportion of participants who correctly recognized SR abstracts.

6a-i) Online questionnaires: describe if they were validated for online use and apply CHERRIES items to describe how the questionnaires were designed/deployed

6a-ii) Describe whether and how “use” (including intensity of use/dosage) was defined/monitored

6a-iii) Describe whether, how, and when qualitative feedback from participants was obtained

6b) CONSORT: Any changes to trial outcomes after the trial commenced, with reasons

7a) CONSORT: How sample size was determined

7a-i) Describe whether and how expected attrition was taken into account when calculating the sample size

7b) CONSORT: When applicable, explanation of any interim analyses and stopping guidelines

"The intervention was of such a nature that the participants could not be blinded.

7a) CONSORT: Blinding - If done, who was blinded after assignment to interventions (for example, participants, care providers, those assessing outcomes) and how

8a) CONSORT: Method used to generate the random allocation sequence

8b) CONSORT: Type of randomisation; details of any restriction (such as blocking and block size)

9) CONSORT: Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned

"After randomization, the participants were allocated to the study arms using a randomization sequence by a third person who was not included in other parts of the study."

10) CONSORT: Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions

11a) CONSORT: Blinding - If done, who was blinded after assignment to interventions (for example, participants, care providers, those assessing outcomes) and how

11a-i) Specify who was blinded, and who wasn’t

"The intervention was of such a nature that the participants could not be blinded."

11b) CONSORT: If relevant, description of the similarity of interventions

Not relevant in this manuscript.

12a) CONSORT: Statistical methods used to compare groups for primary and secondary outcomes

To determine the normality of the variables' distribution, we used the Kolmogorov-Smirnov test. Categorical data were presented as frequencies and percentages, and numerical values were presented as medians with IQR for variables not following normal distribution and as arithmetic means with IQR for variables following normal distribution. Differences between intervention groups A and B for categorical variables were tested using the chi-square test. To express the difference between groups, numerical values were tested with 2-tailed t tests for independent samples (for variables following normal distribution) and Mann-Whitney tests (for variables not following normal distribution). Pre- and postintervention differences were evaluated using the chi-square test for categorical variables and the t test for independent samples for numerical variables. The effect size for the primary outcome (the difference between the percentage of correct answers between groups in the postintervention questionnaire) was expressed using relative risk (RR) and 95% CI, as was the difference between the number of correct answers in the pre- and postintervention questionnaires in both groups. The effect size for the secondary outcome was expressed using odds ratio with 95% CI.

12a-i) Imputation techniques to deal with attrition / missing values

Not applicable to our manuscript.

12b) CONSORT: Methods for additional analyses, such as subgroup analyses and adjusted analyses

Not applicable to this manuscript.

**RESULTS**

A total of 294 participants were assigned to the intervention A group and 295 participants were assigned to the intervention B group.

A total of 81 participants form the group A and 88 participants from the group B were lost after randomization due to not signing into the platform.

13b-i) Attrition diagram

14a) CONSORT: Dates defining the periods of recruitment and follow-up

The trial did not end or was not stopped early.

15) CONSORT: A table showing baseline demographic and clinical characteristics for each group

The demographic characteristics are presented in Table 1 of the manuscript.

15-i) Report demographics associated with digital divide issues

"The median length of working in health care was 9.9 years among participants who received the educational intervention and 9.8 years in the PRISMA checklist group. The median age of the participants in both groups was approximately 30 years, and >85% of the participants in both groups were women (educational intervention group: 140/162, 86.4%; PRISMA checklist group: 146/165, 88.5%).*"

16a) CONSORT: For each group, number of participants (denominator) included in each analysis and whether the analysis was by original assigned groups

16-i) Report multiple "denominators" and provide definitions

"In the postintervention questionnaire, of the 1468 potential correct answers, there were 1086 (74.49%) correct answers to knowledge questions in the educational intervention group (162/327, 49.5%). In the PRISMA checklist group (165/327, 50.5%), of the 1485 potential correct answers, there were 900 (60.61%) correct answers (Table 2). Thus, the effect size for the difference in the number of correct answers to knowledge questions between groups was an RR of 1.23 (95% CI 1.17-1.29); that is, the educational intervention group had 23% (relative risk percentage) more correct answers in the postintervention questionnaire than the PRISMA checklist group."

16-ii) Primary analysis should be intent-to-treat

17a) CONSORT: For each primary and secondary outcome, results for each group, and the estimated effect size and its precision (such as 95% confidence interval)
Thus, the effect size for the difference in the number of correct answers to knowledge questions between groups was an RR of 1.23 (95% CI 1.17-1.29).

In the educational intervention group, the total number of correct answers was 53.16% (775/1458) in the preintervention questionnaire and 74.49% (1086/1458) in the postintervention questionnaire (RR=1.40, 95% CI 1.32-1.48; Table 2). In the PRISMA checklist group, the total number of correct answers was 51.58% (766/1485) in the preintervention questionnaire and 60.61% (900/1485) in the postintervention questionnaire (RR=1.17, 95% CI 1.10-1.25).

17a) Presentation of process outcomes such as metrics of use and intensity of use

17b) CONSORT: For binary outcomes, presentation of both absolute and relative effect sizes is recommended

"In the postintervention questionnaire, of the 1458 potential correct answers, there were 1086 (74.49%) correct answers to knowledge questions in the educational intervention group (162/327, 49.5%). In the PRISMA checklist group (165/327, 50.5%), of the 1485 potential correct answers, there were 900 (60.61%) correct answers (Table 2). Thus, the effect size for the difference in the number of correct answers to knowledge questions between groups was an RR of 1.23 (95% CI 1.17-1.29)."

18) CONSORT: Results of any other analyses performed, including subgroup analyses and adjusted analyses, distinguishing pre-specified from exploratory

"There was no statistical difference in the choice of information sources between the educational intervention and PRISMA checklist groups in the postintervention questionnaire, with multiple possible responses about where the participants would look for answers to a clinical question from their own clinical practice (Table 3)."

18-i) Subgroup analysis of comparing only users

19) CONSORT: All important harms or unintended effects in each group

There were no reported harms or unintended effects.

19-ii) Include qualitative feedback from participants or observations from staff/researchers

DISCUSSION

20) CONSORT: Trial limitations, addressing sources of potential bias, imprecision, multiplicity of analyses

20-i) Typical limitations in ehealth trials

"A limitation of this study is a highly homogeneous sample that does not allow for significant analyses by sociodemographic subgroups. We acknowledge that there is a potential self-selection aspect in our final sample. We do not have data about nonparticipants among the eligible students and, theoretically, there could be some differences between responders and nonresponders. However, this is an inherent problem of any trial—the eligible participants are invited to take part, and they can choose whether they want to participate."

21) CONSORT: Generalisability (external validity, applicability) of the trial findings

21-i) Generalizability to other populations

21-ii) Discuss if there were elements in the RCT that would be different in a routine application setting

22) CONSORT: Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence

22-i) Restate study questions and summarize the answers suggested by the data, starting with primary outcomes and process outcomes (use)

"The primary outcome of this study was the difference in the percentage of correct answers collected from the educational intervention and PRISMA checklist groups when answering questions evaluating knowledge of SRs on the postintervention questionnaire after the participants had read the educational materials. After the training, the educational intervention group had 23% more correct answers than the PRISMA checklist group (ie, the size of the effect expressed in RR was 1.23).

An RCT by Sánchez-Mendiola et al [15] showed a significant effect of EBM education on the final knowledge of EBM among medical students, with a 25.9% increase in correct answers in the knowledge test about EBM [15]."

22-ii) Highlight unanswered new questions, suggest future research

Other information

23) CONSORT: Registration number and name of trial registry

OSF Registry, available at: https://osf.io/rymvx

24) CONSORT: Where the full trial protocol can be accessed, if available

Open Science Framework; https://osf.io/rymvx

25) CONSORT: Sources of funding and other support (such as supply of drugs), role of funders

Open Science Framework; https://osf.io/2mfy

26-i) Comment on ethics committee approval

X26-ii) Outline informed consent procedures

X26-iii) Safety and security procedures

X27-i) State the relation of the study team towards the system being evaluated