

Peer Review File

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Reviewer A:

Overall, I think that this topic is interesting and important, and overall the study and the data are compelling. However, the introduction and discussion sections are disorganized and have numerous grammatical errors, to the point where it is distracting from your data and makes the big picture of the study difficult to understand. I recommend significant revisions to the introduction and discussion sections with the goal of making the paper more focused and the goals of the study more clear.

Lines 29-30: this opening sentence of your abstract is confusing. It could be simplified, for example “palliative care skills are important when caring for patients with advanced illness in a broad range of settings.

Thank you. We followed your suggestion!

Lines 30-31: I would be more specific: when training students in what? Palliative care skills? Communication skills? This comes up later (line 90 for example) but would be good to include in the introduction

Thank you. We followed your suggestion.

Students need to be trained in communication and empathy, both representing essential palliative care (PC) skills.

Lines 60-69: Again, what are the specific skills that the comics are aiming to teach? Compassionate listening? Empathy? Breaking bad news? Using the term “palliative care skills” doesn’t tell me what the students are learning, because palliative care involves a broad range of skills from treating complicated symptoms to discussing goals of care to prognostication, etc.

We specified that point as followed and placed it in another section of the introduction.

Changes in the text: From the broad range of skills that PC demands from a doctor, we focused on the following aspects that can be illustrated by MC’s: advance care planning (ACP), breaking bad news, compassion, communication, end of life (EOL) discussions, empathy, listening and respect.

Lines 72-79: is there any literature on MC that you could cite, especially as it pertains to medical education in other areas? This could help your case for using it in the PC setting.

Thank you for your comment. We added the following paragraph and also added a literature citation:

Regarding EOL topics, emotions, including anxiety can influence both doctors and patients. As it has been shown in the field of cardiology, MC can be useful in reducing anxiety concerning medical interventions. Cardiologists at the Charité Berlin tested whether a comic would help patients better understand the procedure for cardiac catheter examinations. The patients initially had the procedure explained to them using a classic questionnaire. Half of the participants were then randomly selected to receive a 15-page comic that illustrated the catheter and stent implantation. Overall, 72% of the patients were satisfied with the explanation in the comic, in comparison to only 41% in the control group DOI: 10.7326/M18-2976.

Lines 91-96: This sentence is too long and has some redundant parts that could be taken out.

Thank you very much, we changed this following your suggestion and added a literature citation.

Working in the field of PC requires high ethical integrity, communication skills, defining goals of care, participative decision making and professional knowledge DOI: 10.1016/j.ss.2016.11.006. MC might help impart a number of those qualities .

Line 96: The phrase “that demands quite a lot” is unnecessary and could be removed.

Thank you! We removed that phrase.

Line 98-102: I don't see the unifying argument or purpose of this paragraph. You start by bringing up the pandemic (I'm assuming you mean the covid19 pandemic) and remote learning. Then you mention that empathy has been shown to decline during medical school. This phenomenon precedes covid19, but I think you need to make the argument that medical comics could provide a more meaningful way to convey emotional information or to teach communication when in person learning is not feasible. Or something along those lines.

Thank you very much for this valuable comment. We changed the paragraph as followed:

Due to the COVID-19 pandemic, education of students has changed. Lectures were switched to online sessions at many universities and due to numerous challenges in clinical practice, research and teaching, everyday processes also had to be adapted for teachers (12). While research indicates that empathy declines during training in medical school (13), empathy is emphasized as an essential quality in medicine. MC are suitable for conveying emotional information or teaching communication also as part of an online format. MC can express many situations in a vivid and space-saving way. Innovative educational interventions may foster desirable characteristics of a good doctor. Professionalism and reflection can be promoted in this way.

Lines 105-108: “People die from lives and not from diseases” - I'm not sure what this means, and I think a significant part of the field of palliative care medicine deals with the intersection of disease, patient experience, and issues surrounding death. I think the point you eventually make is important, namely that we should involve the patient themselves and not just the information in the chart. The statement about patients being impaired is also distracting and could be removed. Then, you introduce the concept of narrative medicine. I think that this is a

good connection to make, but you probably need an extra sentence explaining how medical comics are similar to or serve the same function as narratives.

Thank you very much for this remarkable comment and your suggestion!
We adapted the paragraph as followed:

PC demands do involve the patients themselves, not just the information read in the patient charts, as a significant part of the PC field deals with the intersection of disease, patient experience, and EOL issues. The so-called „*narratives*“ relating to the individual patient’s life especially matter in PC. The remarkable pioneer of *narrative medicine* Rita Charon described it as “medicine practiced with the narrative skills of recognizing, absorbing, interpreting, and being moved by the stories of illness” (14). MC support the development of *tacit knowledge*, which describes skills and experiences that are difficult to transfer to another person by writing or verbalizing them. MC as an interplay of images, words and dialogue might also serve as narratives as they are able to tell visual stories

Line 114: the term “physical dimension” is confusing - aren’t the comics part of the physical dimension?

Thank you! We changed the sentence into: Providing a holistic perspectives is of particular value when teaching PC skills (12).

Line 115: can you explain more about how MC “train the eye” and which clinical skills this is “essential” for? I agree that visual skills are important in some clinical diagnostics but I’m not seeing the connection with empathy or goals of care discussions, for example.

Following your suggestion, we adapted the paragraph as followed and moved it to another paragraph:

Looking at MC enables a change of perspective. In this way, different needs can be taken into account, and one can step out of one's own role. MC impressively point out varied perceptions about situations. Training the eye to perceive different needs for different needs would certainly help in handling challenging conversations and situations. The variety of topics addressed and several forms of presentation used in MC are suitable for illustrating skills relevant to PC.

Results section: overall I found this appropriate and do not have major concerns with it. I would be interested in breaking down different skills and how effectively they were taught via comic but it does not seem like that data is available. Could be a future direction.

Thank you very much for your valuable comment! We definitely want to further research this area and will take your comment into consideration!

Line 182: can you just say “interest in” instead of “interest caught in”?

Thank you! We did so!

Line 210: grammatical error

Thank you! We corrected that as followed:

In this study, our main finding is that after attending a single lecture on graphic medicine, the students were generally interested in MC. The majority found MC useful as a teaching method in PC and would recommend their use.

Lines 214-215: this first sentence of this paragraph is confusing. Could be simplified, e.g. MC is effective in communicating PC skills due to its diverse and multifaceted presentation.

Thank you! We followed your suggestion and changed the sentence as followed:

Regarding PC education, MC's are effective in communicating PC skills due to their diverse and multifaceted presentations.

Lines 218-219. The last sentence of this paragraph is also confusing.

We deleted the sentence.

Line 220: I would like to know which skills the comics you used were intended to develop.

We added the information you requested as followed:

The MC used in the lecture was intended to portray the required skills concerning ACP, breaking bad news, compassion, communication, EOL discussions, empathy, listening and respect

Line 228-230: last sentence of this paragraph is grammatically confusing

We deleted this sentence.

Line 231: remove the word "do" from this first line of this sentence. This sentence/paragraph should be either removed or added to the previous paragraph.

Thank you! We removed "do" and added the paragraph to the previous paragraph with other words.

Line 234: This is the first time that the concept of self-care is being brought up in this paper, and then the second half of this paragraph is not expanding on this concept.

Thank you! That is correct. We adapted the paragraph as followed:

The importance of self-care is another significant aspect when facing PC issues. Regular supervision and case discussions are needed to be able to deal with EOL issues in the long term. MC can support this by illustrating the danger of burnout or compassion fatigue, among others. Self-care may be encouraged through self-reflection, which can be supported by using MC (21).

Line 263: first sentence in this paragraph is grammatically incorrect.

Thank you! We adapted this as followed:

MC's open new perspectives on medical education.

Line 269: Multiple grammatical errors in this paragraph.

(The study team aims to further implement MC as a teaching method to continuously reach students, people from various healthcare professions, but also patients and their families and caregivers, as well as anyone interested in medicine. MC successfully appeal to the individual perspectives of these groups and are able to bring about a change in perspective. Furthermore, in future projects MC provide the option to invite students to draw MC by themselves which offers the possibility to tackle challenging issues in a creative way (2).

We changed the paragraph as followed:

Our research team aims to further implement the use of MC as a teaching method to continuously reach out to students and healthcare professionals, as well as patients and their families. MC allow these groups to take different perspectives by empathizing with different characters. In future research projects, medical students could be asked to create MC themselves, which provides an opportunity to address challenging issues in a creative way (2).

Reviewer B:

This is a very interesting and original paper. The use of Medical Comics to teach Palliative Care skills is a creative approach and very useful not only in for medical students but also in other health care students and residents. The methodology of this study is well described, with a high number of participants. However, a few things were not clear:

1- The procedure was a 30-minute online lecture on Graphic Medicine and MC. In only 30 minutes what kind of information was done? About MC and PC? Did the students had PC before this lecture? Did it just as an example of the use of MC and a subject (PC) that they already had knowledge or not?

2- The text said, "The different perspectives of patients, caregivers, relatives or medical were illustrated by using MC". Who did the illustrations? The students or anyone else?

I think this is a study that should be published after clarifying these topics in order to stimulate the use of MC in medical education.

Thank you very much for your valuable comments! We adapted the paragraph as follows.

- 1) During this lecture, the following aspects of PC were illustrated using MC: PC conversation skills, communication about prognosis, breaking bad news, dealing with death and dying, visibility and invisibility of symptoms, staff overwork and compassion fatigue. Furthermore, different perspectives of patients, caregivers, relatives or medical staff were illustrated using MC. Prior to this lecture, the students had already attended classes in medical communication and a seminar on the legal aspects of PC. However, they had never been in contact with the field until then. Some students had taken elective courses in PC. The purpose of the short lecture was to present essential aspects of the PC field using MC. The illustrations used in the lecture were from published scientific papers or well-known books (e.g., illustrations 1-3) in the MC field. The lecture

consisted of 15 MC and was extended by theoretical information. Three examples are provided in illustrations 1-3

- 2) The illustrations used in the lecture were from published scientific papers or from well-known books in the field of MC.

Reviewer C:

This cross sectional is focusing on the potential of medical comics to teach palliative care skills. The topic is very original and interesting. The methodology is correct and the results well presented. I will just suggest as I use a lot of CM in my teaching, to use a professional people to draw it : it improve the quality of the drawing and as a non physician people he is expressing better the patient feeling.

Thank you very much for this recommendation! Within the lecture, we were using illustrations/drawings/medical comics by professional artists.

Reviewer D:

The authors have written a compelling opinion piece on the value of medical comics in medical education writ large and in palliative care education more specifically. Statements of opinion regarding the value of palliative care and medical comics are liberally interspersed throughout the paper. However, just as with any study on a genre of intervention, there is no control for the nature, characteristics, or quality of the medical comics used. It is a bit like doing a study and concluding that medicine is an effective modality for relieving pain. That is fine, but WHAT medicine? What makes an effective comic versus and ineffective one? The authors do not detail how the comics used were developed or selected, and based on what criteria? A much more valuable contribution to the field would be for the authors to use their clearly extensive enthusiasm and experience with MC in PC to report on what they have learned about how to critically evaluate medical comics and effectively incorporate them into a curriculum that can be adopted and adapted by others. While feedback from their learners is an important part of this process, reporting on the results of this questionnaire as a standalone study falls short of the scientific rigor and value added for the field to warrant acceptance of the work in its current form.

Thank you very much for your thoughtful comment. We totally agree and also added to our limitations section that there was no control group. At the Medical University of Vienna, in the 5th year of 6 study years, all students of the respective year (about 600) are required to weekly attend the so-called "Grand Rounds". Thus, it is difficult to make a control group here, as the curriculum is very dense. Therefore, it would be helpful to do an intervention - for example a MC communication course - and study if it has an effect (e.g. more confidence of MS in challenging communication situations). We plan to do that as part of another study. We carefully selected the comics from reputable books and published scientific journals and did our best to provide innovative teaching to the students. We have added numerous details to the manuscript according to all reviewers' comments and hope that the purpose of this study is now more clearly described.

Reviewer E:

You have studied a very interesting and innovative method for teaching on palliative care topics. You have an excellent sample size for an educational intervention and have collected some very interesting data which you report here.

I do recommend major revisions to several sections of the paper. I have attached a document with my specific comments to my review. The introduction section needs significant reworking and should include a review of the existing literature in this field. The methods section does not include enough information about the development/administration of the questionnaire, the source of the comics used, or the resources used for statistical analysis or generating tables/figures. The results section includes no figures, which would be preferred for representing your data rather than statistics listed in paragraph form.

"interest caught" reads awkwardly, you might just say "interest"

We did so.

"with" instead of "to"

We adapted that.

Would instead say: This study demonstrates that it is promising...

Thank you. We adapted the paragraph as followed:

Since the lecture was short and the majority of the 668 medical students stated that they had not been previously in contact with the MC-field, it seems promising to further use and evaluate visual and narrative illustrations as an innovative teaching approach in PC.

You make a compelling case for why the reader should be interested in the use of medical comics for teaching palliative care skills. However, the introduction is also your opportunity to review the existing literature on medical comics/graphic medicine/the use of these methods in teaching, and also to inform your reader how your study fits into the existing literature. Without a more extensive review of the existing literature, it is difficult to understand what this study adds to the field.

Thank you for your comment. We adapted the introduction section.

However, regarding the training of medical students (MS), a gap still exists between theoretical teaching and clinical practice.

Would cite reference here.

We put the sentence into the Introduction section and added the following reference:
DOI: [10.1016/j.ijnss.2019.09.008](https://doi.org/10.1016/j.ijnss.2019.09.008).

MH should not be viewed as a discrete subject but as an integral part of modern medical curricula (5). MC are part of MH.

I agree with this statement and understand how this fits into the case you are making with your introduction. However, the remainder of this paragraph seems extraneous.

We deleted this.

Palliative care (PC) requires high ethical integrity, the ability to stay calm and cope well under stress, being empathic, an ability to define goals of care and make decisions, being solution-oriented, having and correctly applying necessary knowledge, lifelong learning and never losing interest in learning, good communication skills, being a team player and having organizational and technical skills. That demands quite a lot, but MH might help to impart a number of those qualities.

Would instead write something like: "PC providers require a diverse set of skills and attributes, including: high ethical integrity..."

Strong empathy

support decision making

Are these skills required of PC providers in particular, or of all clinicians?

Literature cited here would be helpful

Thank you for your valuable comments. We rephrased the paragraph as followed and added a literature citation:

Working in the field of PC requires high ethical integrity, communication skills, defining goals of care, participative decision making and professional knowledge (11). MC might help impart a number of those qualities

We think that these skills are required of many clinicians, but in particular to PC providers who are - among other things - confronted with goals of care, burdensome symptoms and end of life issues and who have a lot of patient contact.

Due to the pandemic, education for students has changed. Lectures were switched to online sessions at several universities and due to numerous challenges in clinics, research and teaching, everyday processes also had to be adapted for teachers (8). Innovative educational interventions may foster desirable characteristics for a good doctor, while research indicates that empathy declines during medical school (9).

Other than communicating that educational innovations are important, a reference to the COVID-19 pandemic does not strengthen your case for using medical comics/graphic medicine to teach PC skills.

Thank you. We adapted the paragraph as followed:

Due to the COVID-19 pandemic, education of students has changed. Lectures were switched to online sessions at many universities and due to numerous challenges in clinical practice, research and teaching, everyday processes also had to be adapted for teachers (12). While research indicates that empathy declines during training in medical school (13), empathy is emphasized as an essential quality in medicine. MC are suitable for conveying emotional information or teaching communication also as part of an online format. MC can express many situations in a vivid and space-saving way. Innovative educational interventions may foster desirable characteristics of a good doctor. Professionalism and reflection can be promoted in this way.

People die from lives and not from diseases, therefore, in PC information about the patient must go beyond treatment charts.

I'm not sure what you are communicating here, I would recommend deleting this.

We deleted the first sentence and adapted the paragraph as followed:

PC demands do involve the patients themselves, not just the information read in the patient charts, as a significant part of the PC field deals with the intersection of disease, patient experience, and EOL issues

Who developed the questionnaire? Was the questionnaire validated previously? Why were these particular items selected to ask about? Was the lecture just given one time? Was the questionnaire administered just one time?

We specified this as followed and added literature:

The non-validated questionnaire was developed by a multiprofessional team from the Division of Palliative Medicine and the Teaching Center of the Medical University of Vienna, following a best practice model (18). It was tested in a pilot phase with 12 students before we started this study. The students provided feedback on their perceptions and the phrasing of the questions. One question had to be re-phrased, following students' feedback.

The lecture was given once and the questionnaire had to be answered after the lecture as we stated in our manuscript.

What aspects were illustrated? perspectives relating to what?

A 30-minute online lecture on PC and MC was prepared for students in their fifth or sixth year at the Medical University of Vienna and held by EKM, a professor of palliative medicine. During this lecture, the following aspects of PC were illustrated using MC: PC conversation skills, communication about prognosis, breaking bad news, dealing with death and dying, visibility and invisibility of symptoms, staff overwork and compassion fatigue. Furthermore, different perspectives of patients, caregivers, relatives or medical staff were illustrated using MC. Prior to this lecture, the students had already attended classes in medical communication and a seminar on the legal aspects of PC. However, they had never been in contact with the field until then. Some students had taken elective courses in PC. The purpose of the short lecture was to present essential aspects of the PC field using MC. The illustrations used in the lecture were from published scientific papers or well-known books (e.g., illustrations 1-3) in the MC field. The lecture consisted of 15 MC and was extended by theoretical information. Three examples are provided in illustrations 1-3.

Due to the high number of students taking part in the lecture, this presented an excellent opportunity to explore the feasibility of MC as a teaching method.

This belongs in your discussion section, it is a strength of the study.

Thank you. We put this sentence to the discussion section.

What tool was used to generate the questionnaire? How was the questionnaire developed and administered?

We added the following information:

... following a best practice model (18). It was tested in a pilot phase with 12 students before we started this study. The students provided feedback on their perceptions and the phrasing of the questions. One question had to be re-phrased, following students' feedback.

Where did the comics come from?

We added the following information: The illustrations used in the lecture were from published scientific papers or from well-known books (e.g. illustration 1-3) in the field of MC.

What resources were used to do statistical analysis? What resources were used to generate tables/figures?

We added the following information in the Statistical analysis section:

Analysis were performed in SPSS 27. The figure was created using MS Excel.

What is your threshold for statistical significance regarding your p values?

Alpha level was set to $p < 0.05$. We also added this in the statistical analysis section, which now reads: The alpha level was set at $p < 0.05$. However, since p-values are strongly dependent on the sample size, our interpretation relied on effect sizes,

In reporting your results, the addition of figures to report out large amounts of data will help your reader more readily interpret the findings of your study. Figures are much more effective at communicating your findings compared to listing out statistics in paragraph form.

We agree with the reviewer and added Figure 1, which depicts the most important data of this study split by gender.

Why would a longer lecture be more helpful?

The current study had not control group. Therefore, it would be helpful to do an intervention - for example a MC communication course - and study if it has an effect (e.g. more confidence of MS in challenging communication situations). In addition, it is difficult to cover challenging content in 30 minutes. However, we deleted the sentence suggesting a longer lecture.

Here you are providing more background regarding MC/graphic medicine. A description like this belongs more in an introduction section rather than a discussion/conclusion section.

Importance of self-care is another important aspect when facing PC issues. Self-care may be encouraged through self-reflection, which on the other hand can be supported by using MC (15). A broad range of graphic medicine is available in regard to PC: to illustrate challenges and important skills, to impart knowledge, to criticize, to offer solutions, to show the way forward, and to offer hope (16). The importance of both soft and hard skills should be acknowledged, and MC support efforts to develop competent and compassionate physicians (17). MC show how useful it can be to step outside one's own role. Comics might serve as an effective vehicle to give voice to varied experiences and besides critically reading and discussing MC, students might also be inspired to create their own original comic (18). MC are also an option to introduce a stronger focus on communication skills, ethics and social sciences and to train "well-rounded doctors" who are able to adapt to the needs of patients from different backgrounds (19).

Thank you for this valuable comment. We agree with the reviewer, that the introduction of our initial submission was lacking important information related to MC. Based on this comment and the comments of the other reviewers, we have included more information as well as more recent literature in the introduction section to provide the reader with a comprehensive impression of MC. Considering the changes in the introduction, we believe that the paragraph marked by the reviewer is well placed in the discussion section. It refers to issues now also included in the introduction and discusses them on the basis of our findings.

Reviewer F:

The study is interesting and the description of the ways in which MC can be most useful is clear, thoughtful, and persuasive. My main concern about publishing the article is whether it is best suited to a journal focused on palliative care, or whether it would be more appropriately included in a journal focused on medical education and teaching methods. It seems that the target audience is medical educators who teach palliative care, which is probably a very small subset of this journal's readers. But that can be a decision for the editors.

I have a few other comments / questions:

Why were students getting a lecture about graphic medicine? Was it solely for the purpose of conducting the study? If not, what benefit would students derive from getting this information?

Thank you for your comment! The students were given the lecture to introduce them to the field of MC. MC were used to illustrate essential PC skills the students may need in the future in a creative way. This was completely independent of the scientific study. The purpose of the study was to investigate whether the use of MC should be pursued in the future.

Could the students have been influenced by the content of the lecture? In other words, was information provided that could have biased their opinions and survey responses?

Since the comics addressed different topics and the questions were formulated neutrally, we do not assume a bias here. Of course, it should be noted that there was no control group, which we also stated in the limitations section. As already described in the comment to reviewer D, we are planning a MC communication course to investigate a long-lasting benefit of the use of MC as a teaching method.

Who is the intended audience for the paper? Is the objective to encourage educators to include comics in educational materials? If so, can you recommend some ways in which comics can be integrated into educational materials?

Lastly, one of the recommendations made in the discussion section of the paper was to provide students with another, longer, lecture on MC. Again, it's not clear why this would be of value to medical students who are not likely to be teaching palliative care (or other topics) in the near future.

We have added a lot of information to our manuscript that hopefully better lines out what we were examining with the current study. We primarily wanted to present challenging content by using MC. Students often shy away from confronting with palliative care or end of life issues, while later in their careers they remark that they feel undereducated in this area. Therefore, we wanted to use a creative method to show important PC skills. Such skills are certainly useful for all doctors, even if they are not going to work in the field of PC. On the other hand, our study results may also motivate teachers to use MC, as many students responded positively to MC.

Reviewer G:

This is an interesting study of the use of medical comics in teaching palliative care skills to medical students. Some refinement of the text is required as well as ensuring generalised statements are not made without evidence.

Introduction

This section could flow better between the different topics raised. Suggest starting with a broad view and then get narrower in topics. Typo on line 107 re "narratives".

Thank you. We restructured the introduction section.

Procedure

More information is needed here to give the context of the study. Were comics used to illustrate a concept or a scenario? Which topics? How many were used? What proportion of the lecture consisted of medical comics?

We specified that as followed:

During this lecture, the following aspects of PC were illustrated using MC: PC conversation skills, communication about prognosis, breaking bad news, dealing with death and dying, visibility and invisibility of symptoms, staff overwork and compassion fatigue. Furthermore, different perspectives of patients, caregivers, relatives or medical staff were illustrated using MC. Prior to this lecture, the students had already attended classes in medical communication and a seminar on the legal aspects of PC. However, they had never been in contact with the field until then. Some students had taken elective courses in PC. The purpose of the short lecture was to present essential aspects of the PC field using MC. The illustrations used in the lecture were from published scientific papers or well-known books (e.g., illustrations 1-3) in the MC field. The lecture consisted of 15 MC and was extended by theoretical information. Three examples are provided in illustrations 1-3.

Discussion

The paper needs to be re-written for the efficient use of words. I'll give an example here - lines 214-216 " In PC education, it is particularly effective to use MC, as they enable multifaceted communication. The largest proportion of students rated PC skills as very important"

Thank you, we followed your suggestion and now wrote:

Regarding PC education, MC's are effective in communicating PC skills due to their diverse and multifaceted presentations. The largest number of students rated PC skills as very important...

Paragraph 3 of the discussion (lines 220-223) - this paragraph has a speculation not supported by evidence provided in the paper - MC "may" encourage medical professional to acquire important PC skills... the survey asked if they understood perspectives, understood the skills and support using MC for teaching. It did not ask if they had acquired PC skills. Thus continues on line 226 that states that MC provides an opportunity to change one's viewpoint. The survey showed that students understood different perspectives, not necessarily that they changed their perspective.

We adapted the paragraph as followed:

MC may encourage medical professionals to understand important PC skills such as empathy, willingness to engage in reflection and professionalism. The MC used in the lecture was intended to portray the required skills concerning ACP, breaking bad news, compassion, communication, EOL discussions, empathy, listening and respect

The paragraph on self care (line 234) is not supported by information earlier in the paper - there is no context provided on how MC is used to teach self care.

Thank you! We adapted the paragraph as followed:

Importance of self-care is another important aspect when facing PC issues. Regular supervision and case discussions are needed in order to be able to deal with EOL issues in the long term. MC can support this by illustrating the dangers of e.g. burnout or compassion fatigue. Self-care may be encouraged through self-reflection, which can be supported by using MC (15).

Conclusion

Line 273 - there is no evidence for a change in perspective only an understanding of a perspective.

Thank you. We have now made this more precise:

MC allow these groups to take different perspectives by empathizing with different characters.

Line 277 last sentence - re helping medical staff to overcome challenges - the study showed it may help them to understand and learn - not overcome challenges.

Thank you. We adapted that and wrote:

In summary, MC embody multi-faceted, linguistic-visual rhetoric and can help students, patients, caregivers, and medical staff to understand and learn PC aspects.

Limitations

The paper does not report on an increase in competency of the PC skills illustrated by medical comics. The effectiveness of medical comics is through self reported understanding only.

Thank you for this valuable comment. We added this fact to the limitations section:

Examining whether competency in PC skills actually increased as a result of using MC is beyond the scope of this study. The effectiveness of MC is limited to being self-reported.

Reviewer H:

I love this idea and think this is an interesting study.

The introduction needs to be concise regarding what the study is meant to examine. The background delves into areas that seem outside the purpose of the paper. In the section beginning with #98 I am not sure how the pandemic was relevant. In area beginning with #108 you briefly discuss narrative medicine. Was this regarding patients telling their stories or using storytelling to help medical students better understand the experience of the patient? The background could use more about how professionalism and reflection and how this can tie into MC.

224-233 would maybe fit better into the background instead of discussion

We followed your suggestion.

Overall, I would tighten up the background to stay on focus with your study which really looked at how MC can be used as a means to teach different perspectives and PC skills.

Thank you! We followed your suggestion and adapted the introduction. Furthermore, we added the following paragraph:

Working in the field of PC requires high ethical integrity, communication skills, defining goals of care, participative decision making and professional knowledge (11). MC might help impart a number of those qualities.

Due to the COVID-19 pandemic, education of students has changed. Lectures were switched to online sessions at many universities and due to numerous challenges in clinical practice, research and teaching, everyday processes also had to be adapted for teachers (12). While research indicates that empathy declines during training in medical school (13), empathy is emphasized as an essential quality in medicine. MC are suitable for conveying emotional information or teaching communication also as part of an online format. MC can express many situations in a vivid and space-saving way. Innovative educational interventions may foster desirable characteristics of a good doctor. Professionalism and reflection can be promoted in this way.