







Photovoice: An active learning tool with community nursing students

Elena Andina-Díaz PhD^{1,2,3}  | Lindsay Welch PhD^{4,5}  | José Siles-González PhD^{3,6}  |
 Nestor Serrano-Fuentes PhD^{2,7}  | Ana Isabel Gutiérrez-García PhD^{3,6}  |
 MCarmen Solano-Ruiz PhD^{3,6} 

¹Department of Nursing and Physiotherapy, University of León, Vegazana Campus, León, Spain

²SALBIS Research Group, University of León, León, Spain

³EYCC Research Group, University of Alicante, Alacant, Spain

⁴School of Health Sciences, Faculty of Environmental and Life Sciences, University of Southampton, Southampton, UK

⁵University Hospitals Dorset NHS Foundation Trust, Bournemouth University, Bournemouth, UK

⁶Department of Nursing, University of Alicante, Carretera San Vicente del Raspeig, s/n, San Vicente del Raspeig, Spain

⁷NIHR ARC Wessex, School of Health Sciences, Faculty of Environmental and Life Sciences, University of Southampton, Southampton, UK

Correspondence

Nestor Serrano-Fuentes PhD, NIHR ARC Wessex, School of Health Sciences, Faculty of Environmental and Life Sciences, University of Southampton, University Road, SO17 1BJ, Southampton, UK.

Email: Nestor.Serrano-Fuentes@soton.ac.uk

Funding information

“Teaching Innovation, PAID-Elena-Andina”, Universidad de León; “Teaching Innovation, Xarxes I3CE-2020-5226”, Universidad de Alicante

Abstract

Objective: To assess nursing students' experiences of using photovoice as a pedagogical approach to active learning in the community.

Methods: A descriptive design with a cross-sectional mixed-method questionnaire was used with 108 students following an educational activity, in which their communities were photographed and the impact of the pandemic on vulnerable populations was reflected. Descriptive statistics and thematic analysis were used to analyze the data.

Results: Seventy eight percent of the students felt that photovoice was an interesting and useful tool for nurses, 89% affirmed it helped stimulate reflection on social and health inequities in times of pandemic, 82% described that it developed many emotions and feelings and 86% would like to disseminate their photographs directly to stakeholders, citizens, and politicians. Three themes were identified in the data: “stimulate critical reflection”, “develop emotional skills”, and “encourage action”.

Conclusions: Photovoice is a successful active learning pedagogical approach that engages nursing students to develop critical awareness while connecting with their communities, with the real world. It fosters students' sensitivity and motivation and encourages them to take action. Teachers need to introduce new scaffolds for active learning, such as photovoice, to provide innovative academic support that nurtures and develops the next generation of nurses appropriately.

KEYWORDS

active learning, community, nursing students, photovoice, social interaction, teaching and learning

1 | BACKGROUND

Reducing inequalities within and between countries corresponds to Goal 10 in the Sustainable Development Goal Agenda of United

Nations to be achieved by 2030, but the effects of the COVID-19 pandemic intensified income inequality in the population, as well as structural and systemic discrimination related to sex, ethnicity or economic status, among others (United Nations, 2015).

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2024 The Authors. *Public Health Nursing* published by Wiley Periodicals LLC.



In these scenarios of health and social inequities, nurses need to emphasize core values the profession, such as compassion and empathy to prioritize the interest of the people they care for (International Council Nursing, 2021; Nursing and Midwifery Council, 2018; World Health Organisation (WHO), 2020).

Since the competency requirements of nurses involve skills such as ethical decision-making, moral reasoning, communication skills and relational skills (Timmins et al., 2022). Therefore, nurse educators must enable learning environments to be spaces that foster future nurses' values, beliefs and feelings (Chen et al., 2019; Jin & Cheng, 2021; Siles & Solano 2017; Ward & Butler, 2019), critical thinking (Spagnol et al., 2019) and provide a greater understanding of the stigma and marginalization of the people they will care for (Demirtas et al., 2021; Habibzadeh et al., 2021).

There are a number of academic research methods that nursing faculty consider in order to achieve these goals. Active learning is a way of fostering and nurturing the core values needed in nursing through problem-solving activities, critical analysis, and reflection activities (Educause Learning Initiative, 2017). Active learning, as a pedagogical approach, includes learning through critical reflection, encompassing the analysis of situations and incidents, and assessing personal beliefs and how they influence and are influenced by social environments (Timmins, 2015). Active strategies have gained ground in recent years in the nursing academic context, bringing students to the center of the learning process (Fields et al., 2021; Ghezzi et al., 2021). Numerous research studies demonstrate the benefits in nursing education of using these participatory methodologies, such as Adánez et al. (2022) who analyzed videos to address gender-based violence, the Greek Chorus as a way to address mental health problems (Donnelly & Frawley, 2020) or telephone support for the elderly during the Covid-19 pandemic (Gresh et al., 2020).

1.1 | Photovoice method

The photovoice method is framed within the socio-critical paradigm and Freire's conceptualization of participatory pedagogy (Freire, 2005), which state that communication and understanding of reality is the way to involve and empower students in a context of responsible and active learning. Participatory action research aims to get people to identify, represent and develop their knowledge in a given situation, with photovoice being one of the methodologies that best fits these objectives (Abma et al., 2019). This photographic technique was developed to give voice (Wang & Burris, 1997) to politically and socially marginalized populations through photographs they take of their everyday lives and experiences, discussing the meanings behind those images and articulating that they can disseminate their findings directly with stakeholders, supporting local action (Hess et al., 2020; Musoke et al., 2015; Watchman et al., 2020). The method is gaining popularity in the health science (Lindhout et al., 2021; Noor et al., 2022) especially in the field of public health (Budig et al., 2018; Chavez-Baray et al., 2022), as a tool to claim the iii) principle of reaching out to policy makers or influencing policy change.

Some educational activities with photovoice have been developed in the academic context to explore the reality of everyday professional life with social work students (Malka, 2020), to describe environmental sustainability issues with podiatry students (Coronado et al., 2020) or to learn experiences abroad with healthcare students (Biber & Brandenburg, 2020). However, there is a lack of research exploring the opinion of university students of the usefulness of photovoice after an educational activity in the community, explicitly through a questionnaire. Further evaluation seems necessary to establish a stronger basis for its usefulness, and therefore, the aim of this research was to evaluate nursing students' experiences of using photovoice as a pedagogical approach to active learning in the community.

2 | METHOD

2.1 | Design

Within the framework of the socio-critical paradigm (Freire, 2005), a participatory educational activity was carried out using photovoice as a method (Wang & Burris, 1997). Following this activity, a descriptive design with a cross-sectional mixed method questionnaire was used to collect the students' assessment of the photovoice method as a pedagogical tool for active learning. In this type of mixed-method design, the data come together in this way: (i) it simultaneously collects quantitative and qualitative data in response to the research questions, (ii) it analyses and connects the two forms of data and their results, (iii) it frames the research procedure and results in theory and philosophy (Creswell & Clark, 2011; Doyle et al., 2009).

2.2 | Participants and settings

In the 2020–2021 academic year, undergraduate nursing students from University of León (Spain), University of Alicante (Spain), and University of Southampton (the United Kingdom (UK)) participated in an educational activity. They were enrolled in the modules of Global and Public Health (1st year, University of Southampton), Culture of Care, Development Education and Critical Thinking (4th year, University of Alicante), and Health Cooperation and Humanitarian Aid Projects (4th year, University of León). Convenience sampling was used for inclusion (Elfil & Negida, 2017).

The educational activity (three sessions) consisted of exploring how vulnerable populations experienced the COVID-19 pandemic, using photovoice as a method (Andina et al., 2022). In the first session, an introduction to vulnerable populations and photovoice was explained to the students. In session two (photo-documentation) (Figure 1 "Alone", Figure 2 "In search for food", Figure 3 "For sale", Figure 4 "Charity" and Figure 5 "Last song", of some students, as visual evidence of the educational activity), the students visited their communities, took three photographs and filled in the SHOWED template, specific for photovoice (Supplementary information 1 with an example of this



FIGURE 1 Alone (P108). [Color figure can be viewed at wileyonlinelibrary.com]

guide filled in by a student) (Wallerstein & Bernstein, 1988). In the third session (photo-elicitation), the students discussed their photographs and narratives in groups and made a photo gallery. The photo exhibition was hosted for 1 month at the faculty.

2.3 | Data collection

At the end of the educational activity, a 22-item questionnaire was administered to the students to determine their perceptions of photovoice as an active learning tool.

The questionnaire consisted of the following items: eight socio-demographic items and fourteen items related to perceptions of the photovoice method. Quantitative data were collected in eleven 5-point Likert-type scale items (from strongly agree to strongly disagree). Qualitative data were collected with three open-ended reflection questions. The questionnaire was created ad-hoc, based on a questionnaire used in a previous exploratory study (Andina, 2020). The items were pre-checked by three nursing experts from both countries with experience in teaching, innovation and pedagogical quality assessment (professor, senior lecturer, and lecturer) for clarity, coherence and relevance. The questionnaire was tested with six students and the results were included in the analysis.



FIGURE 2 In search for food (P11). [Color figure can be viewed at wileyonlinelibrary.com]



FIGURE 3 For sale (P45). [Color figure can be viewed at wileyonlinelibrary.com]



FIGURE 4 Charity (P39). [Color figure can be viewed at [wileyonlinelibrary.com](https://onlinelibrary.wiley.com/doi/10.1111/phn.13285)]

2.4 | Data analysis

Quantitative data (as primary data) were analyzed using descriptive statistics. Socio-demographic characteristics of participants and student perceptions were presented in counts and percentages. The qualitative data were analyzed using thematic analysis to ensure that the analysis was conducted in a stepwise and reproducible manner, and to complement and enhance the understanding of the quantitative questionnaire results. The phases of thematic analysis proposed by Braun and Clarke (2006) were followed, in line with other research based on mixed method questionnaires (Leyva-Moral et al., 2021;

Lucas et al., 2020). These phases consisted of: (i) initial code generation and theme search: two of the research team members (EAD, NSF) coded data features, collating the codes into possible themes and sub-themes; (ii) theme review and themes naming: EAD and NSF reviewed the themes in relation to the coded extracts and the dataset, generating a thematic map of the analysis; and (iii) report writing: all researchers in the team wrote the academic report of the analysis, selecting some vivid and compelling accurate examples, and relating the back of the analysis to the research question and the bibliography.

A data management package (MAXQDA2020®) was used to manage this analysis process.



FIGURE 5 Last song (P87). [Color figure can be viewed at wileyonlinelibrary.com]

2.5 | Ethical considerations

Students received a consent form, with voluntary participation and the possibility to drop out without negative consequences. They received information regarding the study and gave their consent. Regarding the dignity and privacy of the subjects, they had to be informed, receive a participant information sheet and sign a public consent form. In addition, no personally identifiable data (e.g., street names, faces or IDs) were allowed to be captured. The Ethics Committees of the University of León (ULE-039-2020), University of Alicante (UA-2020-12-04) and University of Southampton (ERGO number 62375) approved the study.

3 | RESULTS

One hundred and eight questionnaires were collected (100% participation of nursing students). Table 1 shows the socio-demographic characteristics of the participants.

Seventy-four percent ($n = 80$) of the students found photovoice to be an interesting (original) tool, 71% ($n = 77$) found it to be a useful tool for students and 78% ($n = 84$) found it to be useful for nurses (Table 2). Other benefits of the photovoice tool were to enable creative thinking (81%), improve communication skills among students (79%), and learning in an enjoyable way (57%).

Eighty-nine percent ($n = 96$) of students stated that this method helped to stimulate reflection on social and health inequities in times of pandemics. Regarding the latter, in the open-ended reflection ques-

tions (Table 3), students explained that taking photographs in their community, writing narratives and discussing in class, allowed them to be aware of the reality beyond the mass media information:

To be aware of those vulnerable groups that are very close to us, of how this pandemic is seriously affecting them. To be able to show through an image (which is worth a thousand words) the situation they are living through. In this way everyone can "feel" the reality (P14)

In a way, it forces us to reflect on a very important issue when dealing with patients (at hospital and primary care level), and to know how to present and explain our point of view about it. I repeat that it is not the same to have notions or to be aware that there are vulnerable groups that are having a bad time, as it is to face this reality and dedicate a few minutes to them (P35)

It also allowed them to appreciate what they had and increased awareness of how privileged they were during the pandemic. Some of the students had no problems eating, no problem heating their homes, their parents did not lose their jobs and they were able to follow their classes online, for example:

I have felt very lucky for what I have, for having food on my plate every day and for having a job. I have seen, for example, the soup kitchen, which was quite full at lunchtime, and this has made me think about these things (P39)

TABLE 1 Socio-demographic characteristics of the participants.

Variables		n	%
Gender	Female	90	83
	Male	18	17
Age	18-24	99	92
	25-34	4	3,5
	35-44	4	3,5
	45-54	1	1
I live in	Population more than 200,000 inhabitants	31	29
	Population 100,000-200,000 inhabitants	11	10
	Population 10,000-100,000 inhabitants	43	40
	Population 1000-10,000 inhabitants	16	15
	Population less than 1000 inhabitants	7	6
Nationality	Spanish	104	96
	British	3	3
	Indian	1	1
Ethnicity	White	104	96
	Black/African/Caribbean	1	1
	Gypsy	1	1
	Hindu	1	1
	Latinoamericana	1	1
I invest my time in	Studying	77	71
	Studying and working	31	29
Belong non-governmental organization/voluntary organization	No	92	85
	Yes	16	15
Religious orientation	Christian	56	52
	Atea	38	35
	No religion	10	9
	Agnostic	3	3
	Muslim	1	1

It made me realise how privileged I have been, but also how the closure has affected us all differently (P107)

Eighty-two percent of students ($n = 89$) described that going outside to take photographs and discussing what they photographed helped them to develop many emotions and feelings. In the data obtained from the open-ended questions, the most frequently mentioned feeling was *empathy* for understanding the emotions of others:

This activity helped me to empathise with vulnerable groups, especially those groups that we do not usually take into account (because they are close to us). For example, immigrants. In my town in the Canary Islands, there is a considerable increase of immigrants (during the pandemic) who are looking for a better life. I know a lot of people who think that they come to "steal" work from us when they really come to look for a better life (P47)

I have become more empathetic to those who are affected by the closure. I have realised that some have been really affected, such as artists, small business owners, families that have had to split up and those living with a disability (P107)

Some of the nursing students mentioned *discomfort*, *anxiety* and *fear* of visiting some disadvantaged neighborhoods and asked for photographs of vulnerable populations:

The day I went to take photographs in the Colonia Requena neighbourhood, I felt fear, very fear... No doubt that fear diminished when I began to engage in conversation with these people (P1)

Personally, photographing disadvantaged and vulnerable people caused me stress and discomfort. After a while, I felt better, as I established a relationship with them (P92)

TABLE 2 Nursing students' perceptions with the photovoice tool.

Perceptions	n	%
Interesting (original)		
Strongly agree	80	74
Somewhat agree	25	23
Disagree	3	3
Useful (for students)		
Strongly agree	77	71
Somewhat agree	30	28
Disagree	1	1
Useful (for nurses)		
Strongly agree	84	78
Somewhat agree	24	22
To enable creative thinking		
Strongly agree	87	81
Somewhat agree	16	15
Disagree	5	4
To improve communication skills		
Strongly agree	85	79
Somewhat agree	23	21
To learn in an enjoyable way		
Strongly agree	62	57
Somewhat agree	39	36
Disagree	7	7
To stimulate reflection		
Strongly agree	96	89
Somewhat agree	10	9
Disagree	2	2
To develop emotional skills		
Strongly agree	89	82
Somewhat agree	19	18
Would like to disseminate their photographs directly to stakeholders (citizens and politicians)		
Yes	93	86
Maybe	11	10
No	4	4
The dissemination of their photographs with the stakeholders could raise their awareness		
Strongly agree	83	77
Somewhat agree	25	23
The dissemination of their photographs with the stakeholders could engage them in supporting local actions		
Strongly agree	77	71
Somewhat agree	29	27
Disagree	2	2

Note: Strongly agree: 5 points on the Likert scale; Somewhat agree: 3; Disagree: 2.

TABLE 3 Themes and sub-themes identified from the open-ended reflection questions.

Themes	Sub-themes
Stimulate critical reflection	To be aware of the reality
	To appreciate how privileged they were during the pandemic
Develop emotional skills	Empathy
	Discomfort, anxiety, fear
	Anger, sadness, grief
Encourage action	Would like to disseminate their photographs as a part of a community engagement activity
	To feel the need to do voluntary works

Another feeling described was *anger* at seeing people living in certain situations that were difficult to cope with, with no resources. Some also expressed *sadness* and *grief* at not being able to help them:

Yes, many emotions are aroused in me. Sometimes even certain helplessness. Today during the exhibition, I thought if I were a millionaire, I would buy masks and give them to all the people in need (who says masks say food, clothes...) (P54)

Above all, it made me very angry to investigate the economic inequalities and inequalities of opportunities simply for having been born into a certain social role... the great indifference of the institutions when it comes to protecting these groups (P61)

The emotion that I would highlight would be sadness. It was very hard for me to see some situations (P91)

In addition, the nursing students felt that photovoice encouraged them to take action. 86% (n = 93) of the nursing students would like to disseminate their photographs directly to stakeholders, citizens, and politicians. Some of the proposals put forward by the students were to display the work as part of a community engagement activity at the university, in the city center, on social media or directly with politicians:

Where it can cause more impact is in the university community. It is a large group, and replicating the panels in our faculty to take them to the other faculties can be more impactful and have better results (P9)

Hold an open-air exhibition in a busy place. On Ordoño Street or Calle Ancha (P45)

Nowadays, I think that the communication channel with the greatest impact is the social networks. Moreover, they are tools in which the dissemination of information is very quick and easy. Although it is often necessary to filter to see if the information is true or not (P96)



Send them by email to the local councils and organise a meeting to discuss with MPs and councils (P108)

Seventy-seven percent ($n = 83$) of the students thought that disseminating their photographs to stakeholders would be a way to draw attention to some local problems caused by the pandemic and to raise awareness among them. This could engage them in supporting local actions 71% ($n = 77$). In this sense, some students expressed that after the activity, they felt the need to do voluntary work:

Yes, it has helped me to realise that if we all do our bit, we can achieve great things. We can help even if we are a bit inexperienced, for example, in the project that is being developed at the university (P29)

It definitely encourages you to get involved in volunteering or any other humanitarian aid activity (P48)

4 | DISCUSSION

This study evaluated students' experiences of using photovoice as a pedagogical approach to active learning in the community.

Nursing students found photovoice to be an interesting (original) and useful tool, enabling creative thinking, communication skills (such

as communicating diverse viewpoints in class) and enjoyable learning. This is in line with the findings of Christensen's et al. (2020) and Wass et al. (2019), who explore the opinion of social science students after an educational photovoice activity, as well as Andina's research (2020), who assessed the perceptions of nursing students after a photovoice activity.

Students explained that photovoice helped them to develop critical reflection on social and health inequities, to become aware of reality and to appreciate how privileged they were during the pandemic. In the same vein, Luescher et al. (2021) proposed a photovoice activity in which undergraduate health and social science students reflected on issues of violence and well-being issues, and Woods-Jaeger et al. (2020), with health equity issues. The development of critical consciousness is an aspect that needs to be worked on with nursing students, as they will face increasingly complex societal challenges in the future (The World Economic Forum Report, 2016), including social inequities and the consequences on health (WHO, 2021). Some authors point out that interaction with marginalized populations is recommended to increase social justice awareness with nursing students (Doyle, 2023).

In addition, most nursing students described that photovoice enabled them to develop emotions and feelings such as empathy, discomfort or sadness. Some authors point out that recognizing and stimulating these concepts is basic to sensitize future nurses (Bauchat et al., 2016; WHO, 2020), as high levels of empathy in professionals

Diario de León

Una iniciativa de la ULe cambia corazones de tela por alimentos para familias



Alumnos de Enfermería posan con una bolsa llena de corazones de tela. UNIVERSIDAD DE LEÓN

FIGURE 6 Press report "An initiative of the University of Leon exchanges cloth hearts for food for families". [Color figure can be viewed at wileyonlinelibrary.com]

seems to be linked more efficiently as to the fulfilment of their role in bringing about therapeutic change (Moudatsou et al., 2020). Jackman et al. (2020) and Solano et al. (2021) worked along these lines, encouraging nursing students to cultivate feelings about issues such as the COVID-19 outbreak and violence against women in their photovoice seminars.

Our results captured how the students described this activity, encouraging them to take action in their communities. They expressed that they would like to disseminate their photographs to citizens and politicians, in the hope of raising awareness and engaging them to support local actions. This educational activity encouraged the students of the University of Leon to volunteer. They organized a successful food collection campaign, which was supported by other community members of the community (Diario de León, 2021) (Figure 6 Press report "An initiative of the University of Leon exchanges cloth hearts for food for families"). In this sense, no literature has been found that links university photovoice nursing activities with this stimulus to action.

The photovoice method places students at the center of the learning process in an active way, as well as encouraging them to act in the real world, specifically with health inequities in vulnerable populations. This is an important point, as there is a need to expand efforts to empower future nurses as leaders to achieve goals such as reducing social and health inequalities in population (Osingada & Porta, 2020). It appears to be a convenient, simple, accessible, and cost-effective method compared to other nursing active learning strategies such as dramatization (Van Bewer et al., 2021), simulation (Haddeland et al., 2021; Hovland et al., 2021; Johnsen et al., 2018), flipped classroom (Dehghanzadeh & Jafaraghaee, 2018; Nes et al., 2021), peer learning (Havnes et al., 2016), photo-essay (Stupans et al., 2019), or problem-based learning (Ding & Zhang, 2018), which seem to need more preparation of the actors involved and structural organization to be effective (Ghezzi et al., 2021).

4.1 | Limitations

The results have some limitations and should be viewed with caution. On the one hand, the sample was selected by convenience, so the students may have had some predisposition to learn by this method. On the other hand, the majority were female and the number of participants was smaller in the UK. Therefore, these results have been written in relation to the commonalities found between the two countries. Finally, the questionnaire used was not validated.

On the contrary, one of the strengths of this study is that it provides extensive qualitative data to explain the quantitative results, and that there is a large research gap in this field. Therefore, we consider our results to be an excellent basis for presenting the photovoice method as a successful active learning pedagogical approach.

Future research could further evaluate students' opinions by introducing random assignment, as well as through more heterogeneous samples and settings.

5 | CONCLUSIONS

Photovoice is presented as a successful creative active learning pedagogical approach that engages nursing students in developing critical awareness while connecting with their communities, with the real world. The method fosters students' sensitivity and motivation and encourages them to take action in their cities to reduce social and health inequalities of vulnerable populations. Faculty need to introduce new scaffolds in active learning, such as photovoice, to provide innovative academic support that nurture and properly develop the next generation of nurses.

ACKNOWLEDGMENTS

The authors acknowledge the undergraduate students nursing from the University of León, University of Alicante and University of Southampton for their participation and enthusiasm in this experience. "Teaching Innovation, PAID-Elena-Andina", Universidad de León and "Teaching Innovation, Xarxes I3CE-2020-5226", Universidad de Alicante.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest. All authors have read and agreed to the published version of the manuscript.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ETHICS STATEMENT

Ethical approval has been granted for this study: Ethics Committees of the University of León (ULE-039-2020), University of Alicante (UA-2020-12-04) and University of Southampton (ERGO number 62375) approved the study. The authors declare that the present manuscript has not been published or submitted to any other journal.

ORCID

Elena Andina-Díaz PhD  <https://orcid.org/0000-0001-9687-1967>

Lindsay Welch PhD  <https://orcid.org/0000-0001-5564-2252>

José Siles-González PhD  <https://orcid.org/0000-0003-3046-639X>

Nestor Serrano-Fuentes PhD  <https://orcid.org/0000-0003-3085-7593>

Ana Isabel Gutiérrez-García PhD  <https://orcid.org/0000-0002-5198-8413>

MCarmen Solano-Ruiz PhD  <https://orcid.org/0000-0001-8720-8397>

REFERENCES

- Andina Diaz, E. (2020). Using photovoice to stimulate critical thinking: an exploratory study with nursing students. *Revista Latino-americana De Enfermagem*, 28, e3314. <https://doi.org/10.1590/1518-8345.3625.3314>
- Andina-Díaz, E., Siles-González, J., Solano-Ruiz, M., Welch, L., Delblanco-Ubierno, G., & Fuentes, N. S. (2022). The impact of COVID-19 pandemic

- on health inequities: A photovoice study with nursing students. *Journal of Transcultural Nursing*, 33(6), 732–741. <https://doi.org/10.1177/10436596221119484>
- Abma, T., Banks, S., Cook, T., Dias, S., Madsen, W., Springett, J., & Wright, M. (2019). *Participatory research for health and social well-being*. En Springer eBooks; <https://doi.org/10.1007/978-3-319-93191-3>
- Adánez-Martínez, M. G., Palacio-Gaviria, M. P., Agea, J. L. D., Jiménez-Ruiz, I., Ramos-Morcillo, A. J., Ruzafa-Martínez, M., Durán, F. M., & Costa, C. L. (2022). Improving learning in the management of gender violence. Educational impact of a training program with reflective analysis of dramatized video problems in postgraduate nurses. *Nurse Education Today*, 109, 105224. <https://doi.org/10.1016/j.nedt.2021.105224>
- Bauchat, J. R., Seropian, M., & Jeffries, P. R. (2016). Communication and Empathy in the Patient-Centered Care Model—Why Simulation-Based training is not optional. *Clinical Simulation in Nursing*, 12(8), 356–359. <https://doi.org/10.1016/j.ecns.2016.04.003>
- Biber, D., & Brandenburg, G. (2020). A photovoice analysis of experiences during a short-term study abroad trip to Belize. *Reflective Practice*, 21(5), 619–628. <https://doi.org/10.1080/14623943.2020.1784867>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Budig, K., Díez, J., Conde, P., Sastre, M. G., Hernán, M., & Franco, M. (2018). Photovoice and empowerment: Evaluating the transformative potential of a participatory Action research project. *BMC Public Health*, 18(1), 432. <https://doi.org/10.1186/s12889-018-5335-7>
- Chavez-Baray, S., Martínez, O., Chaparro, P., & Moya, E. M. (2022). The use of photovoice methodology to assess health needs and identify opportunities among migrant transgender women in the U.S.-Mexico border. *Frontiers in Public Health*, 10, <https://doi.org/10.3389/fpubh.2022.865944>
- Chen, J. H., Björkman, A., Zou, J. H., & Engström, M. (2019). Self-regulated learning ability, metacognitive ability, and general self-efficacy in a sample of nursing students: A cross-sectional and correlational study. *Nurse Education in Practice*, 37, 15–21. <https://doi.org/10.1016/j.nepr.2019.04.014>
- Christensen, M. C., Caswell, C., & Trout, I. Y. (2020). A constructivist examination of using photovoice as a teaching method with MSW students and involving the larger community. *Social Work Education*, 41(4), 537–555. <https://doi.org/10.1080/02615479.2020.1858046>
- Coronado, C., Freijomil-Vázquez, C., Fernández-Basanta, S., Díaz, E. A., & Movilla-Fernández, M. (2020). Using Photovoice to explore the impact on a student community after including cross-sectional content on environmental sustainability in a university subject: A case study. *International Journal of Sustainability in Higher Education*, 21(7), 1331–1350. <https://doi.org/10.1108/ijsh-01-2020-0031>
- Creswell, J. W., & Clark, V. L. P. (2011). *Designing and conducting mixed methods research*. Sage.
- Dehghanzadeh, S., & Jafaraghaee, F. (2018). Comparing the effects of traditional lecture and flipped classroom on nursing students' critical thinking disposition: A quasi-experimental study. *Nurse Education Today*, 71, 151–156. <https://doi.org/10.1016/j.nedt.2018.09.027>
- Demirtas, B., Polat, G., Ateş, F. S. Ö., & Ka'opua, L. S. (2021). Poverty and health inequalities: Perceptions of social work students and nursing students. *International Nursing Review*, 69(1), 96–105. <https://doi.org/10.1111/inr.12714>
- Diario de León | Noticias De León Bierzo Y Ponferrada, D. (2021, 12 febrero). Una iniciativa de la ULE cambia corazones de tela por alimentos para familias. Diario de León | Noticias de León, Bierzo y Ponferrada. <https://www.diariodeleon.es/articulo/sociedad/iniciativa-ule-cambia-corazones-tela-alimentos-familias/202102121643312086338.html>
- Ding, Y., & Zhang, P. (2018). Practice and effectiveness of web-based problem-based learning approach in a large class-size system: A comparative study. *Nurse Education in Practice*, 31, 161–164. <https://doi.org/10.1016/j.nepr.2018.06.009>
- Donnelly, P., & Frawley, T. (2020). Active learning in mental health nursing—Use of the Greek chorus, dialogic knowing and dramatic methods in a university setting. *Nurse Education in Practice*, 45, 102798. <https://doi.org/10.1016/j.nepr.2020.102798>
- Doyle, B. (2023). Social Justice Attitudes of Undergraduate nursing students: The impact of praxis. *Public Health Nursing*, 40, 734–739. <https://doi.org/10.1111/phn.13219>
- Doyle, L., Brady, A., & Byrne, G. (2009). An overview of mixed methods research. *Journal of Research in Nursing*, 14(2), 175–185. <https://doi.org/10.1177/1744987108093962>
- Educause Learning Initiative. (2017). 7 Things you should know about: Research on active learning classrooms. <https://tinyurl.com/tlcnzh6>
- Elfil, M., & Negida, A. (2017). Sampling methods in clinical research; An educational review. *PubMed*, 5(1), e52. <https://pubmed.ncbi.nlm.nih.gov/28286859>
- Fields, L., Trostian, B., Moroney, T., & Dean, B. A. (2021). Active learning pedagogy transformation: A whole-of-school approach to person-centred teaching and nursing graduates. *Nurse Education in Practice*, 53, 103051. <https://doi.org/10.1016/j.nepr.2021.103051>
- Freire, P., & Mellado, J. (2005). Pedagogía del oprimido.
- Ghezzi, J. F. S. A., De Fátima Ribeiro Higa, E., Lemes, M. A., & Marin, M. J. S. (2021). Strategies of active learning methodologies in nursing education: An integrative literature review. *Revista Brasileira De Enfermagem*, 74(1), <https://doi.org/10.1590/0034-7167-2020-0130>
- Gresh, A., LaFave, S., Thamilselvan, V., Batchelder, A., Mermer, J., Jacques, K., Greensfelder, A., Buckley, M. E., Cohen, Z., Coy, A., & Warren, N. (2020). Service learning in public Health Nursing education: How COVID-19 accelerated community-academic partnership. *Public Health Nursing*, 38(2), 248–257. <https://doi.org/10.1111/phn.12796>
- Habibzadeh, H., Jasemi, M., & Hosseinzadegan, F. (2021). Social justice in health system; A neglected component of academic nursing education: A Qualitative study. *BMC Nursing*, 20(1), 16. <https://doi.org/10.1186/s12912-021-00534-1>
- Haddeland, K., Slettebø, Å., Svensson, E., Tosterud, R., Wangensteen, S., & Fossum, M. (2021). The effects of using high-fidelity simulation in undergraduate nursing education: A multicenter randomized controlled trial with a process evaluation. *International Journal of Educational Research*, 109, 101813. <https://doi.org/10.1016/j.ijer.2021.101813>
- Havnes, A., Christiansen, B., Bjørk, I. T., & Hessevaagbakke, E. (2016). Peer learning in higher education: Patterns of talk and interaction in Skills Centre Simulation. *Learning, Culture and Social Interaction*, 8, 75–87. <https://doi.org/10.1016/j.lcsi.2015.12.004>
- Hess, R. F., Ruhl, C. M., & Brunson, S. G. (2020). “I hate the word ‘Liver’”: A photovoice study of Burmese and Bhutanese adolescent health care brokers in northeast Ohio. *Journal of Transcultural Nursing*, 32(5), 518–529. <https://doi.org/10.1177/1043659620967437>
- Hovland, C., Milliken, B., & Niederriter, J. (2021). Interprofessional simulation education and nursing students: Assessing and understanding empathy. *Clinical Simulation in Nursing*, 60, 25–31. <https://doi.org/10.1016/j.ecns.2021.07.002>
- International Council of Nurses. (2021). Nurses: A voice to lead: A vision for future healthcare. https://www.icn.ch/system/files/2022-05/ICN_IND_Toolkit_English_FINAL_low%20res.pdf
- Jackman, D., Konkin, J., Yonge, O., Myrick, F., & Cockell, J. (2020). Crisis and continuity: Rural health care students respond to the COVID-19 outbreak. *Nurse Education in Practice*, 48, 102892. <https://doi.org/10.1016/j.nepr.2020.102892>
- Jin, M., & Cheng, J. (2021). The correlation of metacognitive ability, self-directed learning ability and critical thinking in nursing students: A cross-sectional study. *Nursing Open*, 8(2), 936–945. <https://doi.org/10.1002/nop.2.702>
- Johnsen, H. M., Fossum, M., Vivekananda-Schmidt, P., Fruhling, A. L., & Slettebø, Å. (2018). Developing a serious game for nurse education. *Journal of Gerontological Nursing*, 44(1), 15–19. <https://doi.org/10.3928/00989134-20171213-05>

- Leyva-Moral, J. M., Gómez-Ibáñez, R., Rafael, S. S., Guevara-Vásquez, G., & Aguayo-González, M. (2021). Nursing students' satisfaction with narrative photography as a method to develop empathy towards people with HIV: A mixed-design study. *Nurse Education Today*, 96, 104646. <https://doi.org/10.1016/j.nedt.2020.104646>
- Lindhout, P., Teunissen, T., & Reniers, G. (2021). What about using photovoice for health and safety? *International Journal of Environmental Research and Public Health*, 18(22), 11985. <https://doi.org/10.3390/ijerph182211985>
- Lucas, C., Power, T., Hayes, C., & Ferguson, C. (2020). "Two heads are better than one"- Pharmacy and Nursing Students' Perspectives on Interprofessional Collaboration utilizing the RIPE Model of Learning. *Research in Social & Administrative Pharmacy*, 16(1), 25–32. <https://doi.org/10.1016/j.sapharm.2019.01.019>
- Luescher, T. M., Fadji, A. W., Morwe, K., & Letsoalo, T. S. (2021). Rapid photovoice as a close-up, emancipatory methodology in student experience research: The case of the student movement violence and wellbeing study. *International Journal of Qualitative Methods*, 20, 160940692110041. <https://doi.org/10.1177/16094069211004124>
- Malka, M. (2020). Photovoice as a creative coping tool with the COVID-19 crisis in practical training seminar for social work students. *Qualitative Social Work*, 20(1-2), 544–552. <https://doi.org/10.1177/1473325020973309>
- Moudatsou, M., Stavropoulou, A., Philalithis, A., & Koukoulis, S. (2020). The role of empathy in health and social care professionals. *Healthcare*, 8(1), 26. <https://doi.org/10.3390/healthcare8010026>
- Musoke, D., Ekirapa-Kiracho, E., Ndejjo, R., & George, A. (2015). Using photovoice to examine community level barriers affecting maternal health in rural Wakiso district, Uganda. *Reproductive Health Matters*, 23(45), 136–147. <https://doi.org/10.1016/j.rhm.2015.06.011>
- Nes, A. A. G., Høybakk, J. B., Zlamal, J., & Solberg, M. T. (2021). Mixed teaching methods focused on flipped classroom and digital unfolding case to enhance undergraduate nursing students' knowledge in nursing process. *International Journal of Educational Research*, 109, 101859. <https://doi.org/10.1016/j.ijer.2021.101859>
- Noor, M. I. M., Lim, V., Mustafa, A. M. A. A., Azzeri, A., Jaafar, H., Shah, N. K. M., Hussin, N. S., Zainal, M. A., & Abdullah, M. (2022). Photovoice method trends, status and potential for future participatory research approach. *Malaysian Journal of Public Health Medicine*, 22(1), 252–266. <https://doi.org/10.37268/mjphm/vol.22/no.1/art.1519>
- Nursing and Midwifery Council. (2018). The Code: Professional Standards of Practice and Behaviour for Nurses, midwives and nursing Associates. <https://www.nmc.org.uk/code>
- Osingada, C. P., & Porta, C. M. (2020). Nursing and Sustainable Development Goals (SDGs) in a COVID-19 world: The state of the science and a call for nursing to lead. *Public Health Nursing*, 37(5), 799–805. <https://doi.org/10.1111/phn.12776>
- Siles, J., & Solano, M. C. (2017). POESÍA y CUIDADOS: UN INSTRUMENTO PARA LA GESTIÓN DE EMOCIONES y SENTIMIENTOS EN ENFERMERÍA. *Enfermería: Humanizados*, 6(2), 32–38. <https://doi.org/10.22235/ech.v6i2.1463>
- Solano Ruiz, M., Andina Díaz, E., Noreña Peña, A. L., & Siles González, J. (2021). Photovoice and Dramatisation in the Classroom with nursing students: An exploratory study to raise awareness of the cultural and social dimensions of violence against women. *Nurse Education Today*, 103, 104974. <https://doi.org/10.1016/j.nedt.2021.104974>
- Spagnol, C. A., Lorence, B., Dufournet-Coestier, V., & Silva, A. A. (2019). Reflections on a methodology for analyzing professional practice and its possible use in nursing. *Revista Da Escola De Enfermagem Da Usp*, 53, <https://doi.org/10.1590/s1980-220X2018004803434>
- Stupans, I., Baverstock, K., & Jackson, M. (2019). Photo-essay as an assessment strategy for learning about the determinants of health: Students' experiences. *Collegian*, 26(1), 146–150. <https://doi.org/10.1016/j.colegn.2018.07.002>
- Timmins, F. (2015). *A-Z of reflective practice*. Red Globe Press.
- Timmins, F., Thompson, D. R., & Watson, R. (2022). Is the nursing faculty keeping up or slowly drowning? *Journal of Advanced Nursing*, 78(6), e80–e81. <https://doi.org/10.1111/jan.15205>
- United Nations. (2015). Goal 10. Sustainable Development Goals. <https://www.un.org/sustainabledevelopment/inequality/>
- Van Bever, V., Woodgate, R. L., Martin, D., & Deer, F. (2021). Exploring theatre of the oppressed and forum theatre as pedagogies in nursing education. *Nurse Education Today*, 103, 104940. <https://doi.org/10.1016/j.nedt.2021.104940>
- Wallerstein, N., & Bernstein, E. (1988). Empowerment Education: Freire's ideas adapted to health education. *Health Education Quarterly*, 15(4), 379–394. <https://doi.org/10.1177/109019818801500402>
- Wang, C., & Burris, M. A. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education & Behavior*, 24(3), 369–387. <https://doi.org/10.1177/109019819702400309>
- Ward, R. T., & Butler, D. L. (2019). An investigation of metacognitive awareness and academic performance in college freshmen. *Education* 3–13, 139(3), 120. <https://www.questia.com/library/journal/1G1-583693026/an-investigation-of-metacognitive-awareness-and-academic>
- Wass, R., Anderson, V., Rabello, R. C. C., Golding, C., Rangi, A., & Eteuati, E. (2019). Photovoice as a research method for higher education research. *Higher Education Research and Development*, 39(4), 834–850. <https://doi.org/10.1080/07294360.2019.1692791>
- Watchman, K., Mattheys, K., Doyle, A., Boustead, L., & Rincones, O. (2020). Revisiting photovoice: Perceptions of dementia among researchers with intellectual disability. *Qualitative Health Research*, 30(7), 1019–1032. <https://doi.org/10.1177/1049732319901127>
- Woods-Jaeger, B., Daniel-Ulloa, J., Kleven, L., Bucklin, R., Maldonado, A., Gilbert, P. A., Parker, E. A., & Baquero, B. (2020). Building leadership, capacity, and power to advance health equity and justice through Community-Engaged research in the Midwest. *American Journal of Community Psychology*, 67(1-2), 195–204. <https://doi.org/10.1002/ajcp.12462>
- World Economic Forum. (2016, 1 julio). New Vision for Education: Fostering Social and Emotional Learning Through Technology. <https://www.weforum.org/agenda/2016/03/21st-century-skills-future-jobs-students/>
- World Health Organisation. (2020). State of the world's nursing: Investing in education, jobs and leadership. <https://apps.who.int/iris/bitstream/handle/10665/331677/9789240003279-eng.pdf>
- World Health Organization: WHO. (2021). Social determinants of health. https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1www.who.int

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Andina-Díaz, E., Welch, L., Siles-González, J., Serrano-Fuentes, N., Gutiérrez-García, A. I., & Solano-Ruiz, M. C. (2024). Photovoice: An active learning tool with community nursing students. *Public Health Nursing*, 41, 392–402. <https://doi.org/10.1111/phn.13285>