

# Nursing Students' Perception about Peer Assisted Learning and Seminar in Pediatric Nursing at International University of Africa, Sudan

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## Abstract

**Background:** In nursing education, a variety of small group teaching approaches are employed to improve students learning and motivate them to actively participate in the teaching and learning process. Peer Assisted Learning has recently grown in popularity and gained substantial interest. This study aimed to explore the perception of nursing students about Peer Assisted Learning and Seminar method in paediatric nursing. **Methods:** A descriptive cross-sectional design was adopted. All The ninety students in semester seven paediatric nursing course were enrolled. A semi-structured, self-administered questionnaire was used to collect the data. SPSS version 23 was used to analyse the data which then expressed in frequencies and percentages, mean, weighted mean, and SD. qualitative data were analyzed, and key themes were identified. **Results:** the findings showed that all students reported a greater positive perception in Peer Assisted Learning than Seminar in development of learning - teaching skills with mean score of 4.30, 3.66 respectively. Collaboration and interaction, the repose mean score of 4.27 and 3.43 respectively, learning environment the repose mean score of 4.40, 3.61 respectively. Students perceived Peer Assisted Learning as a more effective and favourable method for paediatric nursing in their comments in terms of improving their learning-teaching skills. Self-confidence, self-reflection, communication and demonstration skills, and motivating, enjoyable learning environment. **Conclusion:** Peer Assisted Learning had remarkable benefits as teaching / learning method comparing to Seminar among nursing students. It could be incorporated in the nursing curriculum.

**Keywords:** Peer Assisted Learning, Seminar, Paediatric Nursing.

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## INTRODUCTION

Peer Assisted Learning (PAL) has been utilized in Health Profession Education, including Nursing for many years as one of the small group teaching approaches. It has recently become increasingly popular and has gained substantial attention and interest for undergraduate nursing student's education. (Henning *et al*, 2008; Zarifnejad *et al*, n.d).

PAL has been described as people from similar social groups who are not professional teachers helping each other to learn and learn themselves by teaching as defined by Topping in 1996 (Ross *et al*, 2007) .

Numerous studies provide supporting evidence of PAL's efficiency and remarkable advantages. PAL assisted learners in developing knowledge, attitudes, clinical skills, effective teamwork, and cooperation abilities. Boosted learners' self-confidence, and teaching abilities. (Carey *et al.*, 2018; Guraya & Abdalla, 2020) Furthermore, it has been demonstrated to be a successful method for improving students' performance on assessments (Abootalebi *et al*, 2019; Choi *et al*, 2021).

Students' Seminar is another educational approach utilized in nursing activities. The Seminar is a small group teaching-learning method in which students are divided into small groups and each group prepares a topic material, which is then presented by one or more students under the supervision of teachers, followed by

discussion. Consequently, seminars motivate students to actively participate, and improve their searching, and presentation skills (Edmunds *et al*, 2010; Morgan, 2019).

Although performing nursing care in paediatric procedures is a core component of paediatric nursing skills. Offering safe and competent care in paediatric nursing care can be stressful for nursing students in general, including nursing students in our program. Therefore, before conducting the procedures in a real clinical context, students should always be adequately prepared in their training environment. (Akgül *et al.*, 2018; Sung-Yun & Young-Ju, 2020). When students' stress levels are reduced; studies demonstrated that they become more competent and satisfied. (Park *et al*, 2021; Sung-Yun *et al*, 2020) It is undeniable that paediatric nursing educators as all educators in health profession education play an important role to enhance students' learning by providing variety of teaching and learning strategies to optimize the students learning, confidence and clinical competence (Carr *et al*, 2016) . For this reason, PAL was implemented for the first time in the paediatric course for fourth-year students in semester seven, Faculty of Nursing at International University of Africa (IUA). It is certainly, intended to improve the teaching and learning process, as well as to stimulate self-directed and collaborative learning among students on various paediatric nursing procedures.

Despite the fact that studies compared small group teaching methods techniques to traditional learning (Daud *et al*, 2014; Dwiastanti, 2018; Yazdanpanah *et al*, 2020) or two small group teaching methods such as seminar and fishbowl methods (Tricio *et al*, 2019) , no clear data was identified in comparing PAL to seminar as two small group teaching methods for nursing students. Hence the current study aimed to explore the perception of nursing students about PAL sessions in comparison with seminar and their feedback about their experience.

## MATERIAL AND METHOD

### Study Design

This is a descriptive cross-sectional study design aimed to explore the students' perception on PAL and Seminar in paediatric course. **Setting:** This study was conducted at Faculty of Nursing Science, International University of Africa (IUA) in Sudan in the period of February -March 2020. The Faculty of Nursing Sciences includes nationalities from many African and Asian countries. Students were from

Sudan, Nigeria, Tanzania, Eritrea, Kenya, Comoros, Chad, Somalia, Uganda, Mozambique, Thailand, Malawi, and Niger.

### Sample and Sampling Technique

90 nursing students from the same level, in their fourth year in the six-week block course of paediatric nursing were included in the study as total coverage. All were female and their average age was 21 years.

### Data Collection Tool

Students were given a questionnaire at the end of each session that included both closed and open-ended questions which contains statements about students' perception on PAL and Seminar regarding the development of learning /Teaching Skills, Collaboration, and Interaction, Learning/teaching Environment, the student's responses was measured by the five points Likert scale started from the lowest agreement to highest agreement. An open section was provided for the student's comments and feedback about their experience. A panel of three experts (Assistant and Associate Professors) from different departments were asked to evaluate the content and structure of the questionnaire and its suitability for achieving the study's objectives. Cronbach's  $\alpha$  test was applied for the reliability of the items in the Likert scale which showed high reliability = 0.93.

### Data Analysis

SPSS version 20 was used to analyse the data. Then the data was presented in tables using frequencies, percentages, Mean and Standard deviation, weighted mean to determine the direction of the answer for the statements least agreeable to the most agreeable according to the five-point scale as follow:

1 to 1.79 = Strongly disagree. 1.8 to 2.59 = Disagree , 2.6 to 3.39 = Neutral , 3.4 to 4.19 = Agree , 4.2 to 5 = Strongly agree

Students' written comments and feedback notes on their experience were categorized into themes according to their responses.

### Ethical Consideration

Verbal consent was obtained from the students after full explanation of the study and its aim. Approval from the university ethical committee was obtained reference (FMEC/21/2).

## RESULTS

**Table 1: Students responses on Learning /Teaching Skills experience in PAL sessions (n = 90)**

Learning /Teaching Skills Experience	Strongly disagree		disagree	Neutral	Agree	Strongly agree	Mean	SD	Answer Direction
	f	%							
PAL sessions are helpful in self-directed/independent learning.	f	0	2	3	36	49	4.47	0.674	Strongly agree
	%	0	2.2	3.3	40	54.4			
PAL sessions Improved my abilities in teaching others.	f	0	0	5	30	55	4.56	0.602	Strongly agree
	%	0	0	5.8	33.3	61.1			
PAL sessions improved my communication skills.	f	0	2	13	39	36	4.21	0.772	Strongly agree
	%	0	2.2	14.4	43.3	40			
PAL sessions assisted me to utilize my time effectively.	f	2	0	4	42	42	4.36	0.769	Strongly agree
	%	2.2	0	4.4	46.7	46.7			
PAL sessions increased my self-confidence.	f	0	2	8	45	35	4.26	0.712	Strongly agree
	%	0	2.2	8.9	50	38.9			
PAL encouraged me to reflect on my own performance.	f	0	6	20	16	48	4.21	1.001	Strongly agree
	%	0	6.7	22.2	17.8	53.3			
PAL sessions inspired me to learn and better understanding of the subject contents.	f	0	1	14	16	59	4.48	0.796	Strongly agree
	%	0	1.1	15.6	17.8	65.6			
PAL sessions helped me to improve my demonstration skills.	f	1	0	24	30	35	4.09	0.87	agree
	%	1.1	0	26.7	33.3	38.9			
I feel PAL sessions will help me in my clinical practice/ field work.	f	4	0	5	41	40	4.26	0.919	Strongly agree
	%	4.4	0	5.6	45.6	44.4			
<b>Total</b>	<b>f</b>	<b>7</b>	<b>13</b>	<b>96</b>	<b>295</b>	<b>399</b>	4.30	<b>0.580</b>	Strongly agree
	<b>%</b>	<b>0.85</b>	<b>1.6</b>	<b>11.87</b>	<b>36.4</b>	<b>49.26</b>			

**Table 2: Students responses on Collaboration and Interaction in PAL sessions (n = 90)**

Statement / Responses	Strongly disagree		Disagree	Neutral	Agree	Strongly agree	Mean	SD	Answer Direction
	f	%							
PAL sessions helped me to learn better with my colleagues (group learning).	f	0	2	13	39	37	4.22	0.772	Strongly agree
	%	0	2.2	14.6	43.3	41.1			
The immediate feedback from my colleague in PAL sessions was beneficial.	f	2	2	24	26	36	4.02	0.983	agree
	%	2.2	2.2	26.7	28.9	40			
PAL sessions improve social interaction / teamwork between the group members.	f	0	2	12	34	42	4.29	0.782	Strongly agree
	%	0	2.2	13.3	37.8	46.7			
<b>Total</b>	<b>f</b>	<b>2</b>	<b>6</b>	<b>52</b>	<b>98</b>	<b>115</b>	4.27	<b>0.857</b>	Strongly agree
	<b>%</b>	<b>2.2</b>	<b>19.2</b>	<b>31.6</b>	<b>44.8</b>	<b>2.2</b>			

**Table 3: Students responses on Teaching and Learning Environment in PAL sessions (n = 90)**

Statement / Responses	Strongly disagree		disagree	Neutral	Agree	Strongly agree	Mean	SD	Answer Direction
	f	%							
The environment in PAL sessions made learning comfortable and enjoyable.	f	0	3	6	23	58	4.51	0.768	Strongly agree
	%	0	3.3	6.7	25.6	64.4			
The environment encouraged me to ask /answer /discuss the contents freely with my peers.	f	0	2	20	16	52	4.31	0.895	Strongly agree
	%	0	2.2	22.2	17.8	57.8			
Small group in PAL was very helpful in learning /teaching.	f	0	2	14	22	52	4.38	0.829	Strongly agree
	%	0	2.2	15.6	24.4	57.8			
<b>Total</b>	<b>f</b>	<b>12</b>	<b>24</b>	<b>118</b>	<b>183</b>	<b>20</b>	4.40	<b>0.831</b>	Strongly agree
	<b>%</b>	<b>3.38</b>	<b>6.18</b>	<b>33.26</b>	<b>51.5</b>	<b>5.6</b>			

**Table 4: Students responses on Learning /Teaching Skills experience in Seminar (n = 90)**

Statement / Responses	Strongly disagree		disagree	Neutral	Agree	Strongly agree		Mean	SD	Answer Direction
	f	%				f	%			
Seminars are helpful in self-directed/independent learning.	f	0	12	14	27	37	3.99	1.055	Agree	
	%	0	13.3	15.6	30	41.1				
Seminars Improved my abilities in teaching others.	f	0	1	24	42	23	3.97	0.756	Agree	
	%	0	1.1	26.7	46.7	25.6				
Seminars improved my communication skills.	f	0	15	29	26	20	3.57	1.017	Agree	
	%	0	16.7	32.2	28.9	22.2				
Seminar assisted me to utilize my time effectively.	f	9	0	20	51	10	3.59	1.037	Agree	
	%	10	0	22.2	56.7	11.1				
Seminar increased my self-confidence.	f	0	13	16	50	11	3.66	0.876	Agree	
	%	0	14.4	17.8	55.6	12.2				
Seminar encouraged me to reflect on my own performance.	f	0	29	23	27	11	3.22	1.036	Neutral	
	%	0	32.2	25.6	30	12.2				
Seminar inspired me to learn and better understanding of the subject contents.	f	0	5	35	26	24	3.77	0.912	Agree	
	%	0	5.6	38.9	28.9	26.7				
Seminar helped me to improved my demonstration skills	f	2	4	34	18	32	3.82	1.045	Agree	
	%	2.2	4.4	37.8	20	35.6				
I feel Seminars will help me in my clinical practice /fieldwork.	f	17	4	24	24	21	3.31	1.387	Neutral	
	%	18.9	4.4	26.7	26.7	23.3				
<b>Total</b>	<b>f</b>	<b>3</b>	<b>10</b>	<b>24</b>	<b>32</b>	<b>21</b>	3.66	1.013	Agree	
	<b>%</b>	<b>3.5</b>	<b>10.2</b>	<b>27.1</b>	<b>35.9</b>	<b>23.3</b>				

**Table 5: Distribution of Students responses on Collaboration and Interaction in Seminar (n= 90)**

Statement / Responses	Strongly disagree		disagree	Neutral	Agree	Strongly agree		Mean	SD	Answer Direction
	f	%				f	%			
Seminar helped me to learn better with my colleagues(group learning).	f	0	13	34	30	13	3.48	0.915	Agree	
	%	0	14.4	37.8	33.3	14.4				
The immediate feedback from peers in Seminars was beneficial.	f	11	11	18	33	17	3.38	1.268	Agree	
	%	12.2	12.2	20	36.7	18.9				
Seminars sessions improve social interaction/teamwork between the group members.	f	0	13	27	48	2	3.43	0.765	Agree	
	%	0	14.4	30	53.3	2.2				
<b>Total</b>	<b>f</b>	<b>4</b>	<b>12</b>	<b>26</b>	<b>37</b>	<b>11</b>	3.43	0.983	Agree	
	<b>%</b>	<b>4.1</b>	<b>13.7</b>	<b>29.3</b>	<b>41.1</b>	<b>11.8</b>				

**Table 6: Students Responses on Teaching and Learning Environment in Seminar (n = 90)**

Statement / Responses	Strongly disagree		disagree	Neutral	Agree	Strongly agree		Mean	SD	Answer Direction
	f	%				f	%			
The environment in Seminars made learning comfortable and enjoyable.	f	0	17	25	30	18	3.54	1.018	Agree	
	%	0	18.9	27.8	33.3	20				
The environment encouraged me to ask /answer /discuss the contents freely with my peers.	f	0	14	28	23	25	3.66	1.051	Agree	
	%	0	15.6	31.1	25.6	27.8				
Small group in Seminars was very helpful in learning/ teaching	f	0	13	25	34	18	3.63	0.905	Agree	
	%	0	14.4	27.8	37.8	20				
<b>Total</b>	<b>f</b>	<b>0</b>	<b>15</b>	<b>26</b>	<b>29</b>	<b>20</b>	3.61	0.991	Agree	
	<b>%</b>	<b>0</b>	<b>16.3</b>	<b>28.9</b>	<b>32.2</b>	<b>22.6</b>				

**The Feedback and overall students’ comments about PAL and Seminar:**

Overall, the study indicated that PAL sessions were more positively received and appreciated by all

students than seminars. The teaching / learning experience and the atmosphere, as well as collaboration and teamwork, were recognized as the primary themes from the qualitative analysis. Self-confidence, feedback

and reflection, presenting and demonstration abilities, moreover; PAL implementation in nursing program is to be considered. A shared comments among all students that PAL motivated them to learn more through independent searching and preparation of subject materials, helped them to gain teaching and presentation skills.

### Examples of the Students Quotes

- *“PAL helped me to search more; I feel like I can teach other colleagues and junior students and help them in their studies.”*
- *“Better communication and self - confidence during PAL.”*
- *“In Seminar I feel students were depending on each other. Only few students used to present all the time but in PAL all students have a role to be tutor and tutee and this is fair. All students were participating.”*
- *“I really enjoyed PAL session; it should be started from fundamental of nursing and to be applied in other subjects in nursing for better understanding.”*
- *“The group activity motivated me to learn more and challenge myself for a better performance”*
- *“I feel so motivated, the environment was so relaxing. I had no tension. “*
- *“Reflection on our own work was very helpful, was very beneficial to know my strength and weakness.”*
- *“Presenting the procedure, then to demonstrate it in the skills lab was amazing experience for me, it helped me to be more competent. thanks a lot “*

## DISCUSSION

Several instructional methods of small group teaching were employed in nursing programs. The present study aims to explore the nursing students' perception on two of these approaches, PAL method which had been introduced for the first time in our nursing program in comparison to seminar which is the regularly utilized method.

The findings of this study demonstrated that learners have a more positive perception of PAL when compared to seminar approach in many areas, including teaching and learning skills improvement with responses mean score = 4.3, 3.66 respectively. The vast majority of learners in this study (90%) believed that PAL assisted them in self-directed learning, improving their ability to teach others, managing their time, and building their self-confidence. The findings are in the line with studies in India and Karachi (Rehman *et al.*, 2018; Shete *et al.*, 2019).

Around three-fourth of the students (74%) stated that their demonstration skill had improved, in

addition to their good feeling that PAL will benefit them in clinical and field practice. Furthermore, 90% of students agreed that PAL improved their ability to reflect on their own performance and improved their communication skills in 89% of them. In addition, students reported a better understanding of the subject material, as well as an increase in their knowledge and capacity to conduct the selected paediatric nursing procedures in the skills lab similar findings (Carr *et al.*, 2016; Yazdanpanah *et al.*, 2020). Moreover students felt more supported by their peers than in seminar sessions, Findings were supported by studies which reported the positive impact of PAL on the students' knowledge and psychomotor as well as the behavioural skills. (Bugaj *et al.*, 2019; Carr *et al.*, 2016; Lee *et al.*, 2019; Yazdanpanah *et al.*, 2020)

In addition; the findings in the current study highlight the benefit of cognitive congruence in PAL sessions, as students were able to explain subject materials in the same language which enhance their understanding. This finding is consistent with a review which reported the positive effect on social and cognitive congruence of PAL. (Lodaid *et al.*, 2019).

Despite the fact that the students agreed with the majority of statements regarding the development of their teaching and learning skills in seminar, more than one-third of them responded negatively about the seminar's possible effect to improve their reflection on their own performance or improve their demonstration skills. This finding could be attributed to the seminar's low quality and the students' lack of preparation. A side from that, a few students normally prepare, present, and demonstrate the group's topic. The results were comparable to those of a study in which students had a negative attitude toward seminars because of the lack of preparation. (Patil *et al.*, 2018) in contrast; a positive perception besides the improvement of students' assessment marks were reported in a study due to good quality and well preparation of the students in the seminar (Bouwmeester *et al.*, 2016). Undoubtedly a good preparation is an essential element for success for any small group learning. (Edmunds *et al.*, 2010)

The findings also revealed that though students had positive response on the seminar effect on collaborative learning and interaction, they still expressed more positive perception in PAL than seminar with overall responses mean score = 4.27, 3.43 respectively. Furthermore; The students found the environment in PAL sessions to be more comfortable, enjoyable, and they felt free to discuss and ask questions more freely with their peers with overall responses mean score = 4.40, 3.61 respectively. These findings were on the line with the studies where they confirmed that PAL encouraged students to actively engage in teaching /learning activities besides the comfortable and stress free environment in PAL.

(Guraya *et al*, 2020; Markowski *et al*, 2021; Rehman *et al*, 2018)

In relation to the qualitative analysis, the learners' written comments and feedback were once again highlighted and supported the current study findings. Based on the themes that have been identified; Overall, the students perceived PAL as a favourable teaching and learning method than seminar in many ways, including the learning environment, collaborative learning and teamwork, development of teaching and learning abilities, acquisition of knowledge and psychomotor skills self-confidence, reflection on their own performance, that could help their practical performance and assessment outcome. Beside the importance of incorporation of PAL in all nursing subjects. These finding are congruent with studies done in South Africa and Turkey as well as Korea where they reported substantial benefits of PAL and the importance of incorporating PAL in nursing program curriculum. (Article & Park, 2016; Aslan, 2021; L Gevers, BTEch, 2020)

## CONCLUSION

Although both PAL and seminar were appreciated by students as teaching and learning methods, PAL was perceived as a more effective and highly favourable method for paediatric nursing than seminar among nursing students in IUA. Students reported that Pal provided remarkable benefits for learners in the development of their learning-teaching skills. Self-reflection, self-confidence communication, socialization demonstration skills, fostering self-directed learning and improve their understanding to the subject matter. The Learning environment in PAL was perceived as comfortable enjoyable stress-free. Consequently, the authors of this study advocate that PAL to be incorporated in nursing curriculum at IUA as a learning/teaching method in addition to the well-prepared seminars.

## IMPLICATION

The findings from the present study could be useful to assist nursing educators to implement variety of instructional methods in particular PAL to enhance teaching and learning process in nursing program.

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