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Knowledge of Student Nurses about the Use of Clinical Portfolio

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Abstract

Background: The use of portfolios for learning and evaluation in nursing education has risen in recent years. The key purpose of creating a portfolio is to combine clinical experience with theoretical expertise in order to facilitate studentcentered learning and analytical learning. The use of portfolios for learning and evaluation in nursing education has risen in recent years. The main goals of putting together a portfolio are to match clinical experiences with theoretical understanding, make student-centered learning simpler, and promote reflective learning.

Objectives: To assess the opinions of nursing students about the use of portfolios

To evaluate the perception of nursing students about benefits of portfolios.

Methodology: A cross sectional descriptive study design. The setting will be the university of Lahore. Using SPSS, data analysis was performed and used to define the corresponding chi-square factor. Graphs and tables provided the details.

Result: Total 150 participants are involved this study Mostly participants (72.0%) have knowledge about the guideline and purpose of portfolio and (53.3%) were agree that frequent teacher feedback is important during semester. (47.3%) participants were agree that they participate actively in building of portfolio and 13.3% were disagree. (45.6%) participants agree that portfolio help them to monitor their progress. Conclusion According to the current study's student nurse the portfolio process has assisted their learning and sufficient responsibilities toward their own education. Moreover, portfolio help them in comprehending to improve the relationship between students and teachers. Portfolios and resumes are beneficial to their professional careers. In terms of portfolio perceptions, there were similar differences between first and second year nursing students. Students value consistent instructions, periodic feedback, reducing the amount of documentation needed, and increasing the number of points allotted to the portfolio in regard to the workload.

Key word: Knowledge, Students, Nurses, portfoilio.

INTRODUCTION Background

To maintain healthy clinical standards in the field, academic programs usually prioritize initial and ongoing success tests and reviews for nursing students. Student portfolios were developed as an educational tool in the mid-1980s and adopted by nursing education as a method of evaluation that offers both formative and summative feedback (Al-Madani and Research 2019).

The use of portfolios for learning and evaluation in nursing education has risen in recent years. The key purpose of creating a portfolio is to combine clinical experience with theoretical expertise in order to facilitate studentcentered learning and analytical learning. The use of portfolios for learning and evaluation in nursing education has risen in recent years. The main goals of putting together a portfolio are to match clinical experiences with theoretical understanding, make student-centered learning simpler, and promote reflective learning (Abdullah, Ward et al. 2016).

Official actions regarding university accreditation have a significant impact on medical education in general and nursing education in particularly. As a result, nursing instructors would confirm that students are adequately encouraged in their efforts to demo7nstrate best practice. Taking assessments of such a clinical practices is difficult, and student portfolios may provide a better opportunity to catch this changing practice than standard exams individually (Pool, Govaerts et al. 2018).

Student portfolios are becoming more commonly used in medical education as a method to facilitate successful learning and evaluation. Using a case study approach, to examine the views of a group of undergraduate nursing students regarding portfolio usage in education and using them to evaluate and learning resources in clinical placements in a Saudi Arabian hospital. The findings of this research will assist nursing educators in assessing the importance of portfolios as a method for measuring learning and teaching (Williams 2016).

A portfolio is a series of projects and resources produced by a student to illustrate achievement of the clinical course objectives (Williams 2016).

The portfolio provide the student an ability to collect credible proof of acquiring knowledge and skills learned through practical experience. Portfolios are useful in nursing education because they enable students to demonstrate their abilities while also helping them to become analytical learners and gain skills in assessing the strengths and limitations of their work (Lin, Luo et al. 2020).

To ensure healthy nursing practice, multiple evaluation approaches and recently learning methodologies have been implemented to determine the core competencies. So that the students must possessed by the end of their undergraduate studies (Williams 2016).

Student portfolios are one of the learning approaches and evaluation techniques used in nursing education. Students are exposed to the portfolio approach early in their education and they are seen as offering an opportunity to promote continuous appraisal that has been incorporated into nursing education. This is one way to encourage continued professional development by improving cognitive thinking in future nurses so that they can think more analytically and critically(Ticha and Fakude 2018). A well-designed portfolio includes the active processes of gathering, synthesizing, and arranging related things that best illustrate learning achievement for an evaluation process. Students may benefit from portfolios because they allow them to focus on their experiences, identify learning needs, and initiate additional learning (Endacott, Gray et al. 2017).

Portfolio-based learning is becoming more common in a wide range of educational and professional settings. It has been used to encourage students' desire to become lifelong learners by encouraging and tracking their professional growth. They are often represented as a compilation of students' work and accomplishments over the course of their academic careers. Higher education is looking for new ways to teach and evaluate students that build students' confidence, motivation, and selfesteem as leaders of their own learning environments, portfolios have become increasingly common (Clynes and Raftery 2018).

Any educational program's teaching workshop aspect is vital because it helps student teachers to practice their craft before entering the real world of teaching. A portfolio is one form of evaluative reporting of the teaching practicum learning experience

The practical training component of any educational program is an important mission, because it provide by teachers to the student so that they get an opportunity to try the art of teaching before they actually enter the real world of the teaching profession. A portfolio is one form of evaluative reporting of the teaching practicum learning experience (Oner and Adadan 2016).

Literature Review

According to Gannon et al., there is ambiguity regarding how portfolios can be used in professional and educational settings, as well as whether portfolio material can be used as an evaluation tool (Gannon, Draper et al. 2016). This is complicated by the fact that a student portfolio can take a number of forms and be personalized to the individual's goals and needs. A learning portfolio is most useful, according to Zubizarreta, when a student increases the accuracy of their proof rather than the quantity, as is often the case. A reflective summary, multiple short writings, or a longer narrative that describes learning progress can be included in the learning portfolio. The assistance offered by a mentor or a teacher can be an important factor in the collection of evidence and the development of a portfolio for a student (Zubizarreta 2019).

According to Zubizarreta, a learning portfolio should be designed around three elements:

reflection, recording, and collaboration. When these three elements are combined, the portfolio goes beyond the simple definition of instruction, showing deeper learning is most clearly illustrated. However, research has shown that for both students and faculty, preparing and completing student portfolios can be overwhelming and time-consuming. It takes time for the learner to develop them, as well as time for faculty to prepare and research them (Zubizarreta 2019).

According to Nairn et al, who conducted a study to assess the awareness, student nurses' awareness, skills, and attitudes about the value and function of portfolios, Academic tutors did not make the intent of a portfolio clear to nursing students, and more than half of students did not think the portfolio's content was sufficiently explained (Nairn, O'Brien et al. 2016). Portfolios can be a valuable method for both assessment and learning, according to McMullan, but it is important that both students and mentors receive consistent guidelines and thorough help when using them

(McMullan 2016).

According to Saker and Hu, portfolios emphasize the learning process as well as input from students on their progress toward achieving learning objectives. As a result, as they focus on their success, students' trust and motivation rise. Students take responsibility for their own learning as they are able to judge themselves. Portfolio learning has the ability to enable students to use a number of forms of evidence to show their competence, such as academic and clinical learning outcomes (Sarker and Hu 2016).

The portfolio was found to be an important tool in the creation of teacher identification by Berrill and Addison at Trent University in Canada. According to their results, the majority of respondents considered the portfolio to be a valuable tool in helping them establish their teacher identity. Teachers use portfolios to analyze, discuss, and evaluate their own teaching methods and professional development in order to focus on their unique perceptions of what it means to teach. (Berrill, Addison et al. 2016). Portfolios are much more useful in nursing education because they show proof of the student's continuous construction and path through every practical experience for the reasons mentioned above (Berrill, Addison et al. 2016).

The use of portfolios in education has also been related to improved reflective skills among students. According to a study conducted by Oner and Adadan at Bogazici University in Turkey, pre-service chemistry teachers took part in web-based portfolio creation as part of their teaching practicum, their reflective skills strengthened. Portfolios, in particular, have gotten a lot of interest in teacher education due to their ability to encourage reflective learning skills. Reflection is a key component in transforming students' teachers from mere containers of knowledge into effective means of learning (Oner and Adadan 2016).

Scholars who build portfolios, according to Randolph, Clawson, and Coughlan, analyze their course outcomes and offer metrics and evidence of student learning while also presenting personal conclusions and recommendations for potential improvements (Berrill, Addison et al. 2016).

The practical training component of any teacher education program is an important undertaking, because it is where students' before entering the real world of teaching, teachers are given the opportunity to learn the art of teaching Mkoma. (Msangva. & Yihuan. 2016). Recommended that after teaching experience, students also need to evaluate their experience in order to determine whether or not learning has taken place. One of the evaluation reports on learning experience in teaching practice is the use of a portfolio (Msangya, Mkoma et al. 2016).

Problem statement

Professional portfolios serve as a record of your abilities, accomplishments, and nursing experience. It offers your colleagues, prospective employers, and educational faculty a detailed image of how you got to where you are now as a clinically trained nurse. The problem was prioritized by looking at aspects such as severity and mortality rates. Nurse students have a poor perception of the portfolio. Therefore, considering all these aspects, these particular problems have been chosen for the work of the project.

The study objective will be:

To assess the opinions of nursing students about the use of portfolios

To evaluate the perception of nursing students about benefits of portfolio

OPERATIONAL DEFINITIONS

Knowledge: In this study, knowledge is considering awareness of it will be measured through a 16-item multiple-choice question adopted from the Knowledge Questionnaire (Mileder, Gressl et al. 2019).

HYPOTHESIS

Null Hypothesis H₀:

There is no effect of Knowledge of Student Nurses about the Use of Clinical Portfolio

Alternative Hypothesis H₁:

There is an effect of Knowledge of Student Nurses about the Use of Clinical Portfolio

MATERIALS AND METHODS

Study Designs: A cross sectional study **Setting:** The setting will be the Lahore School of Nursing University of Lahore

Duration of Study: 4 months after the approval of synopsis

Sample Size: sample size calculated from base article. Which is 150.

The sample size of the study was 150 nurses significant level 0.05

N=240

Sample size determined by the formula of Slovin

$$n = N/1 + N (e)^2$$

n=

 $)^{2}$

$$n = 240/1 +$$

240(0.0025)

n=240/1+0.6 n=240/1.6

n=150

Sampling Technique: Simple random sampling Sample Selection: selected The

Lahore School of nursing, The University of Lahore

Inclusion Criteria: All nursing student will be included in this study

Willingness to participate: Only Willing participant

Exclusion Criteria: The participant will be excluded in this study who:

- Students who already took training
- Have already received any educational training on this topic.

ETHICAL CONSIDERATIONS

- Written informed consent (attached) will be taken from all these participants.
- All information and data collection will be kept confidential.
- Participants will remain anonymous throughout the study.
- The subjects will be informed that there are no disadvantages or risks to the procedure of the study.
- They will also be informed that they will be free to withdraw at any time during the process of the study.
- The potential benefit of the study for the participants will be an increase in knowledge regarding portfolio.
- We will do everything we can to protect the privacy of participants. The identity of the participant will not be revealed in any publication resulting from this study.
- Reassure the participants that they can withdraw their consent to participate at any time. They will not be penalized in any way should they decide not to participate or to withdraw from this study.

DATA COLLECTION PROCEDURE Recruitment:

The study participants will be recruited through the process of simple random sampling. A meeting will be arranged with all the eligible participants. In which the researcher will personally explain the study purpose, procedure, and benefits to the participant. In the meeting, participant's questions regarding the study will clear. Demographic data will be collected through face to face intervention and the knowledge of client will be assessed through instrument, Assessment including questionnaires, observation, focus groups, and interviews.

Study Variables:

Knowledge will be measured through 20-item multiple-choice questions adopted from Knowledge Questionnaire.

Methods for Collection of Data:

Facilitator evaluators will be trained regarding the scoring of each scale data collection. The data will be collected after the approval of the synopsis at the given setting.

RESULT

Table (1): Demographic Characteristics

ANALYSIS PROCEDURE

The data analysis will be made using the Statistical Package for the Social Sciences (SPSS) version 25 software to predict the differences in the outcome variables. The frequencies and percentages will be calculated for qualitative variables whereas mean and standard deviation will be calculated for quantitative variables. Sample chi- square test will be used for comparing the mean and significance different will be measured on P value <0.05.

Sr#	Demographic Characteristics	Response f (%)
1	Age	
	20-25 years	36(24.0%)
	26-30 years	(45) (30.0%)
	31-35 years	47(31.3%)
	36-40 years	18(12.0%)
	Above 41 years	4 (2.7%)
	Total	150 (100%)
2	Sex	
	Male	75 (50.0%)
	Female	75 (50.0%)
	Total	150 (100%)
3	Year of study	
	1 st year	19 (12.7%)
	2 nd year	54 (36.0%)
	3 th year	59 (39.3%)
	4 th year	18 (12.0%)
	Total	150 (100%)

This section represents the distribution of participant by demographic characteristics. The data is summarized in terms of frequency and percentage. 24.0% participants belong to 20-25 year of age group, 30.0 % participants have 26-30 year of age group, 31.33% participants have 31-35 year of age group, 12.0% participants have

36-40 year of age group and 2.67% participants have above 41 year of age. Socioeconomic data show that mostly participants who's participates in this study were 26-30(30.0%) and 31-35 (31.3%) year of age. Male and female have equal ratio. 2^{nd} and 3^{rd} year student mostly participated in this study.

Sr#	Statement	Agree		Neither		Disagree	
		frequency	%	frequency	%	frequency	%
1	 Receive clear and complete portfolio guidelines: a. Purpose of portfolio b. Content c. Expected learning outcomes 	108	72.0 %	29	19.3 %	13	8.7%
2	Important to me to receive portfolio guidelines	93	51.1 %	35	23.3 %	22	14.7 %
3	Frequent teacher's feedback is important during semester	81	54.0 %	45	30.0 %	24	16.0 %
4	Portfolio encourage me to search information myself	80	53.3 %	41	27.3 %	29	19.3 %
5	Participated actively in the building of portfolio	71	47.3 %	59	39.3 %	20	13.3 %
6	Portfolio helps me to monitor my progress	83	45.6 %	52	34.7 %	15	8.2%
Most	ly participants (72.0%) have kr	lowledge	portf	olio help the	m to n	nonitor their	progress

Table (2): Nursing Students knowledge toward building of portfolio.

Mostly participants (72.0%) have knowledge about the guideline and purpose of portfolio and (53.3%) were agree that frequent teacher feedback is important during semester. (47.3%) participants were agree that they participate actively in building of portfolio and 13.3% were disagree. (45.6%) participants agree that

portfolio help them to monitor their progress. mostly 55.3% (n=83) participants were agree that portfolio help to measure their progress, 34.7% (n=52) and 10.0% (n=15) were disagree. 47.3 %(n=71) participants actively participate in the building of portfolio, 39.7%(n=59) have no idea and 13.3%(n=20) were disagree.

Sr#	Statement	Agree		Neither		Disagree			
		frequen cy	%	freque ncy	%	frequen cy	%	Total	
1	Portfolio helps me to improve understanding and utilizing of basic concepts as - Problem solving skills - Communication skills	105	70.0%	34	22.7%	11	7.3 %	150 (100%)	
2	Portfolio encourages me to be responsible for: - Independent learning	91	60.7%	49	32.7%	10	6.7 %	150 (100%)	

	 Theory-practice link Decision making Using information technology Self-assessment 							
3	Portfolio reflects my knowledge, activities and skills	78	52.0%	62	41.3%	10	6.7 %	150 (100%)
Table	e # 2 More than half p	articipants	(70.0%)	Prol	blem solvir	ng skills -	Comm	unication ski

were agree that Portfolio helps me to improve understanding and utilizing of basic concepts asProblem solving skills - Communication skills. (60.7%) participants agree that portfolio important for self-assessment.

Table (4): Student nurses' comments toward portfolio.

Sr#	Nursing students' comments toward portfolio	Yes		No			
		frequenc y	%	frequen cy	%	Total	
1	Too much paper work, time consuming	109	72.7%	41	27.3%	150 (100%)	
2	Little emphasis, and interfere with clinical learning	105	70.0%	45	30.0%	150 (100%)	
3	Little guidance, difficulties in writing, not certain what to include	103	68.7%	47	31.3%	150 (100%)	
4	Provide weekly feedback during the semester	84	56.0%	66	44.0%	150 (100%)	
5	Portfolio help me to be confident, to develop myself, able to independent-learning efficiently	93	62.0%	57	38.0%	150 (100%)	
6	Reflects my ability, learning activities	114	76.0%	36	24.0%	150 (100%)	
7	Portfolio improve communication relationship between students and faculty staff	91	60.7%	59	39.3%	150 (100%)	
8	Continue use of portfolio next years	78	52.0%	72	48.0%	150 (100%)	

Table # 3 show that mostly participants (72.2%) comment that portfolio is time consuming, (70%) participants comment that portfolio interfere with their clinical learning and (68.7%) comment that portfolio is a difficult writing. Mostly participant

(76%) comment that portfolio reflect my ability and learning activities and (62%) comment that it develop confident and (52.0%) comment continue of portfolio in next year.

	Student nurses' comments toward portfolio.	Yes	(%)	No	(%)	X ²	p- value			
1	Too much paper work, time consuming.				-					
	Yes	109	72.7	3	1.5	5.607	.021			
	No	41	27.3							
2	Little emphasis, and interfere with clinical learning	ng								
	Yes	105	70.0	3	1.5	7.127	.068			
	No	45	30.0							
3	Little guidance, difficulties in writing, not certain what to include									
	Yes	93	62.0	3	1.5	3.117	.374			
	No	57	38.0							
4	Provide weekly feedback during the semester									
	Yes	103	68.7	3	1.5	3.557	.313			
	No	47	31.3							
5	Portfolio help me to be confident, to develop my	Portfolio help me to be confident, to develop myself, able to independent-learning efficiently								
	Yes	84	56.0	3	1.5	6.182	.103			
	No	66	44.0							
6	Reflects my ability, learning activities									
	Yes	114	76.0	3	1.5	20.625	.000			
	No	36	24.0							
7	Portfolio improve communication relationship be	etween s	students a	ind fac	culty sta	aff				
	Yes	91	60.7	3	1.5	8.471	.037			
	No	59	39.3	0						
8	Continue use of portfolio next years	Continue use of portfolio next years								
	Yes	78	52.0	3	1.5	1.375	.711			
	No	72	48.0							

Table 4: Education association with student nurses' comments toward portfolio.

Chi-square analysis showed that there were a significant association between student nurses' comments toward portfolio x^2 (5.607) =.021, p>

DISCUSSION

Portfolio-based education would be an adaptive teaching method which facilitates contextual learning that is individualized, learner-centered, and outcome-oriented as well as a need to read. Portfolios are a way to keep track of your investments, to keep track of how information is put to use make an effort. That was critical to think about the rules for building a portfolio as relevant, especially when the portfolio had been evaluated. Nearly all first-year nursing students and the bulk of second-year nursing students earn full and transparent portfolio guidelines, as can be observed.

Present study conduct on 1st year, 2nd year, 3rd year and 4th year of students. Study show that mostly participants 72.0% know about the guideline, purpose and content of portfolio which 0.5 but there is no too much paper work, time consuming. Results are shown in the (Table #04)

compare to a study conducted by Abdullah, Ward et al. Present study show that mostly participants 60.7% have positive comment that portfolio make them independent learner and selfconfident and assessment which compare to study conducted by Al-Madani and Research 2019.

Feedback was considered a significant element in constructing and using a portfolio in the current research, and it was delivered by a clinical teacher once, in the middle of the course. Students recommended that the portfolio be evaluated weekly in open-ended questions to enable students to use it more efficiently. Study show that 54.0% participants agree that frequent feedback from the teacher is important during semester which similar to study of Clynes and Raftery.2018.

The majority of first-year students and more than half of second-year students concluded that portfolio building helped them better understand and apply principles such as teamwork and problem solving, according to the findings of this report. This study compare with Nairn et al research.

Present study show that 76% mostly participants agree that portfolio useful for learning activities and help to monitor progress, this study compare able with a study conducted by Al-Madni and Research 2019. Mostly people also comment that portfolio is a work load and time consuming which compare to the study conducted by Dolan et al Students indicated that they need more portfolio input, that they struggle with writing, and that they are unsure about what to include. 3rd year nursing students provided the majority of the responses.

In healthcare curriculum, portfolios are used for a variety of reasons, including promoting reflective practice, providing summative evaluation, and assisting information management systems. Portfolios, in particular, are seen as offering a vital link between corporate and individual learning. Several research exploring the same subject have shown that students do develop favorable attitudes about their portfolio, contrary to the findings of this report. According to these findings, students agree that a portfolio allows them to combine theory with experience, improve personal responsibility for learning, promote professional growth, and participate in reflection.

Conclusion

According to the current study's student nurse the portfolio process has assisted their learning and sufficient responsibilities toward their own education. Moreover, portfolio help them in comprehending to improve the relationship between students and teachers. Portfolios and resumes are beneficial to their professional careers. In terms of portfolio perceptions, there were similar differences between first and second year nursing students. Students value consistent instructions, periodic feedback, reducing the amount of documentation needed, and increasing the number of points allotted to the portfolio in regard to the workload. Student nurses viewed portfolios as a more valuable learning activity than most training and learning approaches. Students' constructive reviews encouraged them to keep using a portfolio in following years of research.

Recommendation

Portfolios can be a powerful learning tool. However, it is important that students obtain detailed guidance. A set of guidelines for and a lot of help for their application. Portfolios will be created in such a way that they are transparent, meaningful, factual, and quick to create, with polished material that is connected to student achievement. • Lecturers and professors must examine students' expectations and the reasons behind certain students' perceptions deteriorating. There should be a daily conversation to students to see if and why portfolios are becoming less valuable to them.

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