

## PERCEPTION OF UNDERGRADUATE NURSING STUDENTS REGARDING RESEARCH

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### ABSTRACT

**Introduction:** Nursing research is a crucial part of undergraduate nursing curricula that improves best possible care for patients through evidence-based-practice (EBP). It helps nursing students think critically and utilize the result of research finding in clinical settings to achieve positive patient outcomes. Nursing research on undergraduate level has been considered the neglected part in Pakistan. Therefore, this study was conducted to find out the perception of nursing students regarding research.

**Material & Methods:** A quantitative based, cross-sectional descriptive study was conducted among undergraduate nursing students (n= 131) at two colleges. The convenient sampling technique was adopted with a margin of 5% error and a 95% of confidence interval. Data was collected by distributing a questionnaire in the participants with their own consent.

**Results:** It was revealed from the findings of the study that majority of the nursing students responded that research is useful to their profession and they had an overall positive perception towards research. While the response of the participants towards research anxiety domain was that most of them (n=88, 67.2) expressed that research is a complex subject, stressful and difficulty to understand arithmetic research.

**Conclusion:** The majority of the participants agreed that research at this level is valuable and it may have a good impact on evidence-based-practice. It is recommended to the nursing administrator and educators to implement research-related workshops from the first year of undergraduate degree, as it is beneficial for future nursing students and it improves evidence-based practice.

**Key Words:** Nursing students, Nursing research, Perception.

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### INTRODUCTION

Research has a vital role in the improvement of every discipline. The same way nursing research is also important, as it helps to improve most favourable care for patients

through evidence-based- practice (EBP). It helps nurses to think critically and utilize the result of research finding in clinical settings to achieve positive patient

outcomes. Moreover, nursing research is a progressing domain in which professionals can contribute through their skills and experience to nursing practice and achieve holistic care.<sup>1</sup> Nursing students are potential nurses and they should not only know how to conduct a good research, but also, its effective utilization. For nursing students, research is necessary not only on graduate but also on undergraduate level. It will not only help to equip nurses with the knowledge and utilization of research, but also, the research findings will improve the value of patient care. It is only doable when undergraduate nursing students are engaged in activities of research during their academics.<sup>2</sup> Though, research is at basic level in nursing curricula, but undergraduate nursing students usually find it difficult to understand, at the same time it is challenging for the academicians too to engage students in learning research.<sup>3</sup>

Undergraduate nursing students are optimistic towards research, but they face lack of guidance, confidence, and opportunity to carryout research. Evidence based practice through research is an integral part of quality healthcare, as students of nursing need relevant information to be aware of the care that they give. Further studies and cooperation of institutions may improve the research culture among students.<sup>4</sup> A study was carried out on Turkish nursing students to find out the consciousness and attitude of nursing students towards research. It was suggested that the awareness of research at nursing schools should be initiated.<sup>5</sup> As it is obvious that nurses are expected to provide high-quality and evidence-based care, therefore, the research knowledge is the basis for it, so by implementing research activities in baccalaureate nursing program is an essential step to develop the interest of students in research.<sup>6</sup> Another study conducted on Swedish nursing students' attitude towards research has shown most of the students anticipated that research about nursing would benefit them in the future. Students who had some interest in particular research area were comparatively better to carry out more research projects in the future, therefore, it is essential to give

confidence to student's interest in research during their undergraduate nursing education.<sup>7</sup> In spite of developments in education and research about nursing across the globe, nursing still remains an underestimated and is slowly progressing. Nursing research on undergraduate level has been considered the neglected part in Pakistan.<sup>8</sup> Hence, giving priority to research on undergraduate level may give positive outcomes for nursing students to make their practice evidence-based. Research is being used as guidance for our practice, as experienced nurses have considered it the most essential to legitimize nursing as a profession. Barriers to the nursing students regarding research are that they cannot, understand, conduct and utilize research.<sup>9</sup> Undergraduate nursing students present a wide variety of questions which remain unanswered; therefore, research in this domain is needed. Nowadays, it is necessary for nurses to have an updated knowledge in the practice, but there are barriers to research utilization in practice. Hence, nursing students are required to have awareness of research since beginning and training about research activities should be on regular interval in nursing curricula.<sup>10</sup> Through conduction of research, students develop competencies in research methodology; statistics and its utilization in clinical practice on undergraduate level. Moreover, it will further enhance the foundation of nursing curricula and will meet the practice needs in the future.<sup>11</sup> Currently, there is a need for nursing research to make the practice as evidence based. So, a strong research foundation will be mandatory for the formation of nursing as a distinguished discipline as well as the establishment of profession.<sup>12</sup> Nurse educators will develop nursing education through qualitative and quantitative research. When the nursing education is developed through research then it can be truly said that nursing education is evidence based.<sup>13</sup> The intention of this study is to assess the perception of undergraduate nursing students regarding research.

## **MATERIAL AND METHODS**

A cross-sectional descriptive study was done on senior nursing students of the two

prominent nursing colleges' one from public and other from private sectors in Peshawar, KP to explore the undergraduate nursing student's perceptions regarding research. Convenient sampling technique was used for the selection of the study participants. Convenient sampling is a non probability sampling method where subjects are chosen due to their easy accessibility and closeness to the researcher. The calculation of the size of the sample was done by Raosoft software with a known population of 199, having a 5%, of error margin and a 95%, interval of confidence and a size of sample 131 was calculated. Undergraduate nursing students of year 3 and 4 were there at the moment of collection of data were included to be the part of study whereas students refuse to participate in the study were excluded. To evaluate undergraduate students' perceptions about research, a questionnaire of Papanastasiou was adopted.<sup>22</sup> The questionnaire consists of 32 measurable elements and is classified into five parts.

Data was analyzed through SPSS version 22, means and standard deviations were calculated for continuous data whereas frequencies and percentages were calculated for categorical data.

For this research project, an ethical approval was taken from the Rehman College of Nursing and Institutional review board. Eligible nursing students were provided with written information highlighting the use of the study. The participation was made voluntary through a well explained informed consent. Confidentiality and anonymity of the information they provided was assured and can only be disclosed with their permission if needed. Approval for data collection were obtained from the principals of the colleges.

## RESULTS

The most of the participants in this study were females (n=90, 68.67%) out of total of 131 participants (Table 1). The average age of the participants was  $22.05 \pm 1.14$  (M $\pm$ SD). Most of the participants (n=86, 65.6%) were studying in the 3rd year while (n=45, 34.4) were studying in the 4th year. While the distribution of participants from different semesters is shown in the pie chart.

Table 2 shows the nursing students' perception of research in five domains; effectiveness of career research, anxiety in research, positive attitudes toward research, relevance in research to life, and difficulty in research. Almost all of the nursing students responded that 'research is very useful to make their career' (n=130, 99.2%), 'research is valuable to every professional' (n=125, 95.4%), 'all the students should be taught research' (n=125, 95.4%), 'the skills that are acquired in research is useful for them in future' (128, 97.7). Although 98.5% (n=129) revealed that 'research is connected to their field of study', 'research is indispensable in their professional training' 80.2% (n=105). However, 87% (n=114) agreed that they will 'utilize research learning in their profession' and most of the nursing students (n=116, 88.5) expressed that they can 'benefit from research'. While, 74.8% (n=98) had a positive attitude towards research that they 'like research', (n=93, 71%) 'Love research', and (n=88, 67.2) 'enjoy research'. The responses of participants towards research anxiety domain was that majority of them (n=88, 67.2), expressed that 'research is a complex subject', and is 'a stressful', (n=, 65, 49.6). As for most of the nursing students, 83.2% (n=109) responded that 'research-oriented thinking play a important role in daily life' and 'research is related to their life' (n=80, 61.1%). However, almost more than half (n=81, 61.8%) have a 'trouble with arithmetic' in research difficulty domain, and (n=74, 56.5%) find it difficult to 'grasp the concepts of research'.

## DISCUSSION

The endeavor of the present study was to assess the awareness of nursing students concerning research. The questionnaire consisted of 32 elements that were measured in five domains: effectiveness of research in a career, anxiety in research, research positive attitudes, research to life relevance, and difficulty in research. The most of the nursing students had a activist attitude towards research and emphasized that research is crucial in their profession. It is obvious that research findings can be utilized in nursing practice; it reduces the

practice-theory gap and creates logical thinking and a critical approach.<sup>14</sup> In accordance with the studies from other countries, the majority of the participants reported that research is indispensable in their practice, useful in their career and will implement research approaches in their practice. It can be concluded from these findings that the utilization of research can strengthen nursing as a profession.<sup>15,2</sup> Finding from other another study in Australia suggested that most nurses and nursing students viewed research as significant in patient care and it has a high role for nurses, and they expressed interest in conducting research despite the fact that many nurses have barriers such as scarce resources, lack of skills in research and inadequate time to participate in research.<sup>16</sup> similarly, another study found that 89.2% of study groups actively working on research projects and has a good orientation towards international research results.<sup>17</sup> Onwuegbuzie and Papanasatasiou et al. expressed that nursing students at the undergraduate level find statistical concepts difficult and have a huge fear and nervousness towards research. This research apprehension can ultimately affect the performance of students and low efficacy for research-related activities.<sup>18,19</sup> while, in the present study, the participants asserted that research is stressful (n=65, 49.6) and is a complex subject (n=88,67.2). The statistic anxiety is connected to the students' performance in statistical concepts and research methodology.<sup>20,21</sup> hence, in our study, nearly more than half (n=81, 61.8%) have 'trouble with arithmetic' in the research difficulty domain, and (n=74, 56.5%) find difficult to understand the concepts of research.

The finding of this study is limited to generalize to other nursing students due to the consistent sample nature. However, the response rate was 100%. The study was limited to nursing students of two colleges in KP. Upcoming studies should include large sample size and focus on barriers towards the utilization of nursing research.

## CONCLUSION

In conclusion, the undergraduate nursing students had a positive perception of

research. Most of the participants agreed that research at this level is useful and it may have a good impact on evidence-based practice. However, many of the participants have difficulty understanding statistical and research concepts. It is recommended to the nursing administrator and educators to implement research-related workshops from the first year of undergraduate degree as it is beneficial for future nursing students and it improves evidence-based practice.

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Table 1 shows demographics

Variable	Group	Frequency	percentage
<b>Gender</b>	Male	41	31.3
	Female	90	68.67
<b>Year</b>	3 <sup>rd</sup> year	86	65.6
	4 <sup>th</sup> year	45	34.4
<b>Age</b>	Mean age	22.05±1.14 (M±SD)	

Table 2. Responses of the participants regarding research

<b>Research usefulness</b>	<b>Agree</b>
<b>disagree</b>	
1. Research is useful for my career 1(.8)	130(99.2)
2. Research is connected to my field of study 2(1.5)	129(98.5)
3. Research should be indispensable in my professional training 25(19.1)	105(80.2)
4. Research should be taught to all students 7(5.3)	124(94.7)
5. Research is useful to every professional 5(3.8)	125(95.4)
6. Research is very valuable 5(3.8)	125(95.4)
7. I will employ research approaches in my profession 17(13)	114(87)
8. The skills I have acquired in research will be helpful to me in the future 3(2.3)	128(97.7)
9. Knowledge from research is as useful as writing 11(8.4)	120(91.6)
<b>Research anxiety</b>	
10. Research makes me nervous 69(52.7)	62(47.3)
11. Research is stressful 66 (50.4)	65 (49.6)
12. Research makes me anxious 74(56.5)	57(43.5)
13. Research scares me 87(66.4)	44(33.6)
14. Research is a complex subject 43(32.8)	88(67.2)
15. Research is complicated 56(42.7)	75(57.3)
16. Research is difficult 49(37.4)	82(61.8)

17. I feel insecure concerning the analysis of research data 73(55.7)	58(44.3)
<b>Positive attitude towards research</b>	
18. I love research 38(29)	93(71)
19. I enjoy research 43(32.8)	88(67.2)
20. I like research 32(24.4)	98(74.8)
21. I am interested in research 32(24.4)	98(74.8)
22. Research is interesting 26(19.8)	105(80.2)
23. Most students benefit from research 15(11.5)	116(88.5)
24. I am inclined to study the details of research procedures carefully 31(23.7)	100(76.3)
25. Research acquired knowledge is as useful as arithmetic 17(13)	114(87)
<b>Relevance to life</b>	
26. I use research in my daily life 64(48.9)	67(51.4)
27. Research-orientated thinking plays an important role in everyday life 22(16.8)	109(83.2)
28. Research thinking does not apply to my personal life 68(51.9)	63(48.1)
29. Research is irrelevant to my life 80(61.1)	51(38.9)
<b>Research difficulty</b>	
30. I have trouble with arithmetic 50(38.2)	81(61.8)
31. I find it difficult to understand the concepts of research 57(43.5)	74(56.5)
32. I make many mistakes in research 42(32.1)	89(67.9)