



## KEY STAKEHOLDERS' PERCEPTIONS REGARDING ADVANCED PRACTICE NURSING IN PAKISTAN

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ARTICLE INFO	ABSTRACT
<b>Keywords:</b> Advanced Practice, Stakeholders, Nursing	<b>Aim:</b> To explore the perceptions of key stakeholders regarding advanced practice nursing in Pakistan.
<b>Corresponding Author: Mr. Jamal Ud Din Khan,</b> Assistant Professor Upper Swat College of Nursing and Health Sciences, Swat Pakistan Email: <a href="mailto:jamal.kmu545@gmail.com">jamal.kmu545@gmail.com</a>	<b>Methodology:</b> A qualitative case study research design was employed to facilitate an in-depth exploration of perceptions within a defined context. With a sample size of 11 determined by data saturation, purposive sampling was utilized as a data collection technique. Face-to-face, in-depth individual interviews were conducted, recorded, and analyzed. The study spanned six months, receiving approval from the ethical review boards of the Khyber Medical University.
	<b>Results:</b> Five themes emerged those were: Stakeholders' views regarding advanced practice nursing, anticipated challenges and issues in introducing APN in Pakistan, Potential benefits of advanced practice nursing, Required Qualification and competencies for APN, Strategies for commencement of Advanced practice nursing
	<b>Conclusion:</b> The study explores the significance of advanced practice nursing in addressing the healthcare needs of Pakistan's growing population. Recognizing it as a timely imperative, the findings highlight the need for nurses to elevate their knowledge and skills. Despite anticipated hurdles, the study concludes that advanced practice nursing holds the potential to enhance the overall healthcare system, emphasizing the importance of proactive measures to address challenges before initiation.

## INTRODUCTION

Advanced practice nurse works in a specialized area where exceptional clinical abilities and expertise are obtained through a combination of knowledge and training.<sup>1,2</sup> The emergence of advanced practice roles for nurses has evolved into a global trend; developed countries have established them while developing countries are trying to do so. Role differentiation among healthcare professionals is both essential and challenging.<sup>3</sup> The APN jobs have evolved in diverse ways throughout the past century, and they are still evolving today as the majority of countries develop these roles for nurses to meet various healthcare needs.<sup>3</sup> The researchers explore expertise, training, the scope of practice, laws, and regulations, and results, which together make up the definable and distinguishing essence of advanced practice nursing.<sup>1,2,4,5</sup> Although advanced practice nursing (APN) is still a relatively new concept, during the past 100 years, there have been clear patterns for development from specialty practice to APN.<sup>6</sup> Moreover, the nurse practitioner (NP) arose in Europe around the 1960s in response to the unmet healthcare requirements of populations in remote regions. However, the origins of APN can be found in the 1890s.<sup>2</sup> In the field of nursing specialties, the operating room and obstetrics were among the first.<sup>7</sup> Today, developed as well as developing nations exhibit advanced practice nursing (APN). To fulfill the expanding demands for healthcare around the world, the World Health Organization (WHO) encourages its expansion.<sup>2,8</sup> The aftermath of World War II, where the lack of experienced nurses on the civilian side during the war required the training of additional nurses to fill this shortage, served as the main trigger for the formal establishment of advanced practice nursing, especially for the Clinical nurse specialist (CNS) role.<sup>9</sup> The distinctive contributions of APN to healthcare are supported by a significant amount of empirical literature, and these contributions have drawn attention in the literature on healthcare policy. The autonomy for working at the edges of nursing's constantly changing and adaptable constraints puts advanced clinical practice distinguished.<sup>10</sup> Both governmental and private healthcare institutions are part of the Pakistani healthcare system. Less than 17 dollars were spent on each Pakistani's health in 2005 and 2006, which is extremely low by international standards.<sup>11,12</sup> The amount allocated to healthcare is about 0.8%, which is even less than Sri Lanka (1.4%) and Bangladesh (1.2%).<sup>13</sup> A significant portion of the country's delivery system for healthcare is made up of both the private and public sectors.<sup>14</sup> More responsibilities come on nurse leaders to improve the quality of care and give hands to the health care system of Pakistan by providing quality nurses for the betterment of the community. When it comes to healthcare challenges in impoverished countries like Pakistan, scholars pay more attention than policymakers do.<sup>15,16</sup> According to the World Health Organization (WHO), low- and middle-income nations will have a global shortage of 10 million health workers, including nurses, midwives, and doctors, by 2030. This is one of the profession's largest concerns.<sup>17</sup> Advanced nursing practice is the need of the day for the health care system of Pakistan. As we know it is a broad field that encompasses a particular form of nursing practice, especially advanced nursing roles, settings, and factors influencing role development, execution, and evaluation are all important.<sup>18</sup> In addition, research shows that advanced practice nursing roles have evolved as a result of two key challenges: first, a large decline in the number of physicians, and second, an increase in the number of patients and day-by-day growth of the population.<sup>19</sup> Moreover, doctors and other healthcare providers are in favor of advanced roles of nurses, they accept nurses as skilled healthcare providers.<sup>20</sup> Hence, some physicians viewed APNs as experts in their fields with the ability to expand their role in society. However, some concerns existed about their prescribing role.<sup>21-23</sup> So it was important to explore the views of nursing leaders, doctors, and policymakers regarding advanced practice nursing in Pakistan, to help in the commencement and initiation of this great goal for the nursing profession as well as for the people of the community in Pakistan. The study aimed to explore the perceptions of key stakeholders regarding advanced practice nursing in Pakistan. Therefore, the study was to find out how stakeholders felt about policy, education level, criteria, and recommendations regarding the inception and establishment of advanced practice nursing in the country.

## Methodology

### Study Design

This study employed a **qualitative case study methodology**. Utilizing case studies allows for a comprehensive exploration of the issue under investigation, facilitating a nuanced understanding and elucidation of the study's problem. Data was gathered using an in-depth interviewing process to meet the research purpose. In-depth interviewing involves extensive face-to-face meetings with participants to explore their perceptions of a specific concept. This technique aims to draw out a clear picture of the participant's viewpoint on the research problem, with the participant seen as the expert and the interviewer as the learner. The primary researcher utilized an interactive method during the interview to collect data, conducting the study with ongoing reflexivity. This design was chosen to explore the comprehensive views of stakeholders regarding APNs in Pakistan.

### Study Settings, Study Population, Sample Size

The study was conducted in **Peshawar**, with perspectives from different stakeholders collected through in-depth interviews. A study population is a group of individuals who share the features that are of interest to the researcher.<sup>24</sup> The study population comprised stakeholders in authoritative positions with direct or indirect roles in Pakistan's healthcare system, particularly in nursing education, management in tertiary care hospitals, regulatory bodies, and healthcare policy development. The sample size consisted of **11 participants**. In this study, data saturation was achieved after 11 interviews, leading to the conclusion that further interviews were unlikely to yield new information.

### Sampling Technique, Study Duration and Sample Selection

The study employed **purposive sampling**, a classic non-probability technique. Participants were selected based on specific characteristics relevant to the research question. In this case, key stakeholders with significant roles or perspectives in the context of advanced practice nursing in Pakistan were intentionally chosen to provide valuable insights. The study was completed within **six months** following approval from the graduating committee (GC), advanced research board (ASRB), and ethical review board (ERB) of Khyber Medical University.

#### Inclusion Criteria:

- Physicians with international experience
- Nurse-educationists (teaching MSN and above)
- Public health professionals, health directorate focal persons, policymakers
- Nursing Directors in tertiary care hospitals

#### Exclusion Criteria:

- Physicians with international experience but no experience working with APNs
- Stakeholders without prior knowledge of advanced practice nursing
- Stakeholders unwilling to participate

#### Data Collection Procedure

Approvals were obtained from the relevant boards, and eligible participants were provided with written and verbal details about the study. Semi-structured, face-to-face interviews were conducted, with participants given the option to respond in Urdu or English. The interviews were audio-recorded, and probing questions were used to facilitate in-depth exploration. Each interview was transcribed on the same day, with handwritten notes taken during the sessions to capture observations. Participants' facial expressions were also noted. All interview recordings were kept confidential, and participants' consent was obtained before data collection.

#### Data Analysis Procedure

Data analysis followed **thematic analysis**, as outlined by Braun and Clarke. The process involved six steps: familiarization with the data, coding, identifying themes, reviewing themes, defining and naming themes, and

producing the final report. Audio recordings were transcribed into English, and the data was repeatedly reviewed to ensure accuracy.

### Ethical Considerations

The study received ethical approval from Khyber Medical University's advanced research board and the ethical review committee. Participants were informed of the study's purpose, risks, benefits, and their rights to withdraw. Informed consent was obtained, and privacy and anonymity were ensured.

### Trustworthiness

The "trustworthiness" of qualitative research findings is defined as its quality, sincerity, and authenticity. It has to do with readers' assurance about their conclusion.<sup>25</sup> Credibility, reliability, confirmability, and transferability all contribute to trustworthiness. Long-term participation, peer debriefing, triangulation, negative case analysis, and member-checking all helped to establish credibility. The researcher confirmed the data with participants and supervisors to ensure that all information was correctly understood. Dependability was obtained by a clear methodology description, which enabled the study to be replicated. The data and concepts were checked by the study supervisor, who worked independently as a coder. Maintaining an audit trail and requiring participants to validate their data assured conformability. The research supervisor's advice also helped to corroborate the study's findings. Detailed descriptions of the research site and participants enhanced transferability.

### Results:

A total of 11 participants were involved (n = 11), with 3 female participants (27.3%) and 8 male participants (72.7%). Regarding education, 1 participant (9.1%) held a Ph.D. in nursing, 2 (18.2%) were Ph.D. nursing scholars, 2 (18.2%) were MRCP doctors, 4 (36.4%) held MSN degrees, and 2 (18.2%) had BS Nursing/MPH degrees. The participants' roles included 3 nurse educators (27.3%), 4 nursing directors from KPK's tertiary care hospitals (36.4%), 2 members from the health directorate and nursing council (18.2%), and 2 doctors with MRCP degrees who have worked with APNs abroad (18.2%). (See Table 1 below)

**Table 1: Demographic Data of the Participants**

Table 4.1: Demographic Data of the Participants			
Characteristics		Frequency	Percentage
Gender	Male	08	72.7%
	Female	03	27.3%
Education	BS Nursing /MPH	02	18.2%
	MSN	04	36.3%
	Ph.D. Nursing Scholars	02	18.2%
	Ph.D. Nursing	01	9.1%
	MRCP	02	18.2%
Status in organization	Nurse educationist	03	27.3%
	Nursing directors	04	36.3%
	Health Directorate / Nursing Council	02	18.2%
	Consultants at Tertiary Care Hospital	02	18.2%

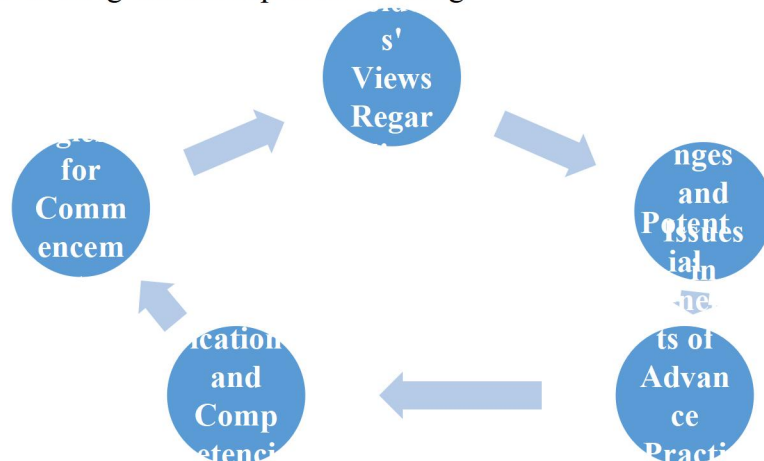
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## Themes and Categories

The transcripts were reviewed multiple times after transcribing and translating the interview recordings. The data were coded, resulting in 155 codes. During axial coding, redundant codes were removed, leaving 20 categories. From these categories, 5 key themes emerged:

### Key Themes:

1. Stakeholders' views on advanced practice nursing
2. Anticipated challenges in introducing APNs in Pakistan
3. Potential benefits of advanced practice nursing
4. Required qualifications and competencies for APNs
5. Strategies for implementing advanced practice nursing



**Figure1. Major Themes of the Study**

**Table 2: Major Themes Categories and codes**

Major Theme	Categories	Codes
1. Stakeholders' views regarding APN	Definition of APN Job description for advanced practice nurse Role and scope of APN Importance of APN	APN concept clarity, Definition Key responsibilities, job descriptions  Domain for APNs, independent, critical thinking, decision-making qualities Lack of doctors, medical needs not fulfilled, doctors migration
2. Anticipated challenges and issues in introducing APN	Misperception about APN role and status Intra-professional deficiencies in nursing Inter-professional hurdles  Lack of planning and resources in the HCS	Lack of understanding, Limited Recognition  Lack of competencies, Conflicts among nurses, Lack of quality education Role ambiguity, Power dynamics, Misconceptions about roles Inadequate Strategic Planning, lack of resources
Potential benefits of advanced practice nursing	Advantages for the hospitals  Advantages for the people of the community	Reduce the burden, treatment of minor cases, Management of cases at peripheries Health care on the doorstep, reducing the financial burden, a good referral

	Advantages for the doctors  Advantages for the nurses	Reduce the burden on doctors, health education, and follow-up calls Educating nurses, motivation and reward for nurses
Required qualification and competencies for advanced practice nursing	<ul style="list-style-type: none"> <li>Qualification and clinical experience</li> <li>Speciality courses/ Speciality tracks</li> <li>Training/ Resident-ship under doctors' supervision</li> <li>Competency exam/licensing</li> </ul>	MSN degree and experience, Master's degree, Minimum qualification, experience in specific areas Competencies in specialty fields, Distinct fields Training/ Resident-ship, Doctors' coordination and supervision, Training at tertiary care hospitals Procedure for licensing, Assessment of APNs, Monitoring of training and practice
Strategies for commencement of Advanced practice nursing	Solutions for the barriers Piloting and evidence-based practice Proper regulation and monitoring Evaluation and feedback from the community	Clarity about the APN role, people's education regarding the APN role Piloting, proof, evidence-based practice Role of PNC as a regulatory body, Monitoring bodies, Pathways and procedure Outcome evaluation, Community satisfaction, and feedback, areas of improvement

### Theme 1: Stakeholders' Views Regarding Advanced Practice Nursing

The theme "Stakeholders' Views Regarding Advance Practice Nursing" emerged as a result of participants' statements about their perceptions of advance practice nursing in terms of its definition, job description, role and scope of advance practice nurses as well as doctors' shortage and importance of APNs for rural and urban areas of Pakistan. The majority of participants described APNs as nurses who have advanced knowledge and skills, which means they have advanced degrees in nursing as well as some specialized training to assess, diagnose, and prescribe some treatment independently. Moreover, participants pointed out that they will have a very good impact on the health status of Pakistani people, as most of the developed countries have already given space to APNs in their health care system. *"Advanced practice nursing is the process in which the nurse does a thorough assessment and then makes a proper diagnosis. The patient may be prescribed some type of medicine or other treatment."* (Participant 5) Most of the participants expressed their perspectives about the job description that advanced practice nurses are allowed to prescribe certain medicines and can give treatment for minor diseases at the community level while a few participants expressed their concerns that they should have very specific and limited roles and must follow the nursing domain. They should not portray themselves as imposter doctors. *"They do have a very specific role when they are working under the supervision of a consultant with a dedicated specialty. They can prove very helpful, efficient, and economical if utilized in the right way. Their job description and roles are very specific."* (Participant 4)

Some of the participants stated that APNs have a wide and advanced role, which is the enhancement of basic nursing. The scope of practice can be improved and following the domain of nursing they can do better practice at tertiary care hospitals as well as in peripheries. *"Advanced nurses have a special domain for nursing, and according to that domain, in his or her clinical perspective and clinical nursing approach, and accordingly, nurses, keeping that in mind and for patients' needs and patients' conditions, are prescribing some investigation to diagnose and treat them."* (Participant 1). The majority of the participants expressed the importance of advanced practice nursing, that it is the need of the time. This will be beneficial for the rural population as well as for posh areas. It will reduce the burden on doctors and will aid in the care of the patient

because of the doctor shortage and decreased number of health care providers. It was a missing pillar and it will complete the gap in the health care system of Pakistan.

*“if we talk about Pakistan according to me, where there are no doctors or people don’t have much access to doctors, particularly in rural areas, there is a need for advanced nurse practitioners, and these specific roles and jobs should be made on this basis.” (Participant 1)*

### **Theme 2: Anticipated challenges and issues in introducing APN in Pakistan**

The majority of participant expressed their opinions regarding the misperceptions present in our society and health care regarding the role of APNs. They said that there are inter-professional misperceptions and intra-professional misperceptions, which means people are taking this thing in another way. Either they are confused about the APN role or the media are misleading them and portraying the APN in the wrong way. It is not the replacement for doctors, and nurses and doctors have their domains.

*“Although some people, I mean they are, are confused by this, the question is misleading for them; they think that the nurse is the replacement for the doctor, and it is not. Advanced nurses have a special domain for nursing, and according to that domain” (Participant 1)*

*“We are not replacing doctors; the practice of doctors is done through advanced practice nursing. But in advanced practice, nurses would be working in parallel with the doctors. (Participant 9)*

Some of the participants thought that there are internal issues in the nursing profession, either in the nursing education system of Pakistan or in hospitals during practice. They said that nursing institutions are much more nowadays, which means that nurses have improved, but there is a need to focus on quality, because there is a lack of quality nursing education in our country. This may be one of the issues that can cause obstacles and must be avoided in the implementation. A participant also revealed the issue among nursing professionals, that we are blaming our nurses and creating hurdles for our colleagues.

*“Sorry to say that, but there is a mushroom growth of nursing institutions in Pakistan, you know. You see nursing colleges on every street here and there, so I mean, first, all those nurses should have and Should be allowed to be qualified nurses from a proper institution,” (Participant 10)*

*“Secondly, in nursing, if there is too much leg pulling, there could be different critiques on a minor mistake, so your professional will come to halt your way. This is also a barrier.” (Participant 3)*

Most of the participants stated that there are inter-professional issues between nurses and other healthcare providers specifically with doctors. They are not in the mood to accept this role easily and they may become the hurdle as they are thinking that APNs are their replacement. They are not aware of APN's roles and there is a conflict regarding the roles and job descriptions among them.

*“If you watch social media, you will see people like doctors and physicians who are against the nurse practitioner role because they are not aware of and do not accept this role.” (Participant 6)*

*“Like the doctors are against the idea that nurses should be allowed to practice. But it is a reality that all over the world, advanced-practice nurses are working and prescribing medication.” (Participant 9)*

The participants also mentioned that lack of planning and resources may also be the anticipated issues because we don’t have a plan and pathway yet for advanced practice nursing. We do have a lack of set criteria for it. Moreover, we are lacking resources for their training inside hospitals and also in peripheries if we deploy them.

*“However, as we are well aware currently, we don’t have any regulations or pathways to develop the competencies of nurses, in the future they may be able to perform this role.” (Participant 5)*

### **Theme3: Potential benefits of advanced practice nursing**

The theme “potential benefits of advanced practice nursing” also emerged in this study. The sub-themes include advantages for hospitals, advantages for people of the community, advantages for doctors, and advantages for nurses. Study participants stated that if we deploy APNs in the rural areas, they will treat



minor cases over there and so these cases will not visit the tertiary care hospitals. However, only complex cases will be referred to hospitals. Consequently, the burden on major hospitals will be grossly reduced.

*“So if we allow advanced practice nurses to work in the community, it will reduce the burden on our hospitals. Because those patients who are going to hospitals for minor illnesses will be treated at their doorstep by nurses.” (Participant 9)*

The majority of the participants stated that APNs will not only reduce hospital burden but will be also beneficial for the people of the community as they will receive cheaper treatment at their doorstep and community level.

*“if the patient is properly diagnosed there and helped under the available resources according to me the patient’s hectic will also be reduced, and the financial burden on his family will also be reduced.” (Participant 8)*

Most of the participants voiced that, apart from the advantages of APN for hospitals and people of the community it will be beneficial for doctors too. They will reduce the burdens on doctors in providing good referrals from the community as well and they will work as helping hands with doctors in tertiary care hospitals.

*“So first of all, APNs will decrease the burden on the doctors. The second important point is that the APNs, along with this, will help the doctors in the diagnosis of the patient, in the treatment of the patient, in health education, or even in education regarding patient medication or lifestyle modification.” (Participant 5)*

*“The second thing is that sometimes for the doctors to reach everywhere and to do every task is not possible. especially for running some advanced clinics, which may need counseling in terms of exercise, dietary counseling, and some health advice, so they can be very nicely utilized in those OPDs, where they can interact with the patients. They can also be used in telephonic follow-up calls with the patients.” (Participant 4)*

Moreover, APNs will provide many advantages for nurses and the nursing profession. As spoken by some participants they will educate the graduate nurses working at bedside with advanced knowledge and skills. Furthermore, advanced practice nursing will enhance the image and morals of nurses and the nursing profession.

*“However, it is a motivation; if they are to be trained and you make them practitioners, their image will become good and their image will improve among people. They will work after being motivated. Their image will also be improved in the hospital.” (Participant 3)*

*“And for nurses, the profession will develop more; they will get development; it will be a reward; they will get the feeling of achieving something; they will get the feeling of doing something.” (Participant 1)*

#### **Theme 4: Required Qualification and Competencies for Advance Practice Nursing**

When asked about the competencies and qualifications, the subthemes that emerged were: qualification and licensing, specialty courses/ track system, training/resident-ship under doctors’ supervision, and competency exam/licensing.

Most of the participants expressed that APNs must have an MSN degree and also some clinical experience. Some participants said that experience should be in years and some told it in working hours to be done in tertiary care hospitals. As a result, the APNs will get knowledge and skills as well as confidence to make them capable of working independently. Initially, the qualification must be a master's degree in nursing having advanced knowledge of medicine, and health assessment as well as advanced knowledge of diseases and their effects on the body.

*“In my view, the minimum qualification must be master initially, at least for 5 to 10 years, and after that, we may change this qualification, keeping in view the results and studies done on these APNs.” (Participant 5)*

*“According to me, one should have a minimum master’s degree because it is about the life of the patient. If you want to treat a patient, the minimum qualification you should have is a master’s degree.” (Participant 8)*



*“First of all, it should be MSN-only. First of all, MSN should be for 5–10 years, and after that, people will gain awareness, and competency will increase day by day.” (Participant 11)*

The participant also stated that there should be specialty courses or a track system for giving training to APNs. To make them qualified in different specialties they must have courses in respective fields like pediatrics, psychiatry gynecology, etc. so the policymakers should plan pathways and regulations regarding APNs to streamline the process of training and recruiting Advanced practice nurses.

*“Secondly, we need to structure a program after MSN. These will be the competencies required for APNs if he or she would like to do advanced practice as a pediatrician, an advanced practice nurse, a general APN, or if they would like to be advanced practice nurse of gynecology.” (Participant 5)*

Some of the participants also proclaimed that we haven’t had APNs recently so for the time being APNs should be trained under doctors’ supervision in tertiary care hospitals and there should be a residency program like doctors. The doctors have a well-established program for training their TMOs (Trainee Medical Officers). We can work in collaboration with them and can take help from the Pakistan Medical and Dental Council to train our advanced practice nurses in the initial phase. Moreover, the start should be taken in tertiary care and then APNs once trained, should be deployed in the peripheries.

*“If PNC pursues this case with PM and DC and gets coordination from doctors, their system is developed, so take help and coordination from them, so that whenever we need your help, you have to coordinate and support us.” (Participant 1)*

*“In the first stage, advanced practice nursing should be implemented in a tertiary hospital, where they are working with a dedicated consultant who is a specialist in that specialty and works for at least 1 to 2 years to get comfortable with the role that he or she is doing, and if it can be utilized in the periphery, then transfer to the periphery.” (Participant 4)*

Furthermore, the participants stated that there must be a competency exam at the end of the training or residency program. The exam should be both an OSPE/ OSCE or NLE-type exam in which the APNs must be evaluated theoretically and practically. This competency check is important because they will practice independently and must have the capabilities to assess, diagnose, and treat the patient in peripheral areas as well as in hospitals. There should be a licensing system for Advanced practice nurses which will be renewable after two years, under the umbrella of PNC.

*“The government has to support us, and there should be a regulatory body, not only to issue licenses but also to determine how to issue the licenses for practitioners. It should be based on professional practice evaluation; based on nursing competency, there should be an exam like the NLE.” (Participant 1)*

*“And after that exam, there must be a structured assessment of the competencies that these APNs must have and implement while providing care to the patient.” (Participant 5)*

*“But here I would say that if we allow such practice at our community level, then it will be the responsibility of the regulatory bodies, especially the Pakistan Nursing Council, The training should be monitored by the Pakistan Nursing Council, and the practice should be monitored by other regulatory bodies as well.” (Participant 9)*

### **Theme 5: Strategies for Commencement of Advanced Practice Nursing**

When participants were asked about their suggestions to policymakers for the successful commencement of advanced practice nursing in Pakistan, they replied positively and inferred their expert opinions.

The first sub-theme revealed that there should be proper solutions to overcome barriers and misconceptions among healthcare providers regarding advanced practice nursing. There should be a clear message to doctors and the roles should be clear to them through dialogues and meetings with high authorities to make sure about nurses’ domains. APNs are not the replacements for doctors and they have their role and scope of practice. The doctors are there for treatment while the APNs will be there as helping hands and will reduce the burden on doctors.

*“The doctors have their roles. Which is for the treatment of disease, especially in hospitals. However, these nurses will reduce the burden on the doctors. They will be a helping hand to the doctors.” (Participant 9)*

*“first of all this misperception should be removed, people need to be sensitized. When you are not educating people about something, and these are educated people, I think some inter-professional meetings should be arranged, some sessions should be done, universities also have the responsibility to arrange some seminars and workshops.” (Participant 1)*

The participants also suggested piloting to ensure an evidence-based practice. Moreover, it will provide data for showing to the community and other healthcare professionals that APNs are working well and they can manage their work independently. Initially do the piloting in the needy districts and then deploy in the whole population after receiving training. So after piloting it will become part of the policy and evidence-based practice.

*“I think my suggestion is that if they show resistance initially, as doctors show resistance, conduct a pilot. And deploy them in the community after receiving training. If the results are good, then I think there is no need for resistance; it will become part of policy.” (Participant 3)*

The majority of participants suggest that there should be proper monitoring and regulatory systems to keep an eye on the practice of APNs as well as on the training and education of advanced practice nurses. Furthermore, participants asserted that good compliance will be needed regarding quality and it is also the responsibility of regulatory authorities.

*“And then there are the monitoring bodies that can monitor the quality of the health care services that should be provided by the advanced practice nurses. but also the quality of education they are getting at the institute regarding advanced practice nursing.” (Participant 9)*

Most of the participants also suggest that there will be a need for evaluation of the results and to assess the patient’s satisfaction. Moreover, there will be a need for financial credentials, and based on these outcomes further decisions regarding advanced practice nursing can be taken.

*“And then there should be an evaluation of the advanced practice nurses to see what the outcomes are, and there should also be room for improvement in the program. So with time, the structure of the program could be made much more effective and beneficial for the community.” (Participant 9)*

## **Discussion**

### **Stakeholders’ Views regarding Advance Practice Nursing**

This theme emerged from the participants’ perceptions related to advanced practice nursing, in which the participants define in various ways that advanced practice nursing is the process in which the nurses have advanced knowledge and skills, they may have extra certification and courses, moreover, they do a thorough assessment and then make a proper diagnosis. The patient may be prescribed some type of medicine or other treatment. This definition of APNs is quite similar to a study conducted in 2009 by Joyce et al., which defines an APN as a registered nurse with advanced training who has gained the expert knowledge base, complex decision-making abilities, and clinical competencies required for extended practice, the qualities of which are influenced by the setting and/or country in which s/he is authorized to practice.<sup>25</sup> The results of this study show two more sub themes regarding job descriptions and also the role and scope of advanced practice nursing. The survey by Joyce et.al. also discussed the scope of practice for APNs includes a wide range of activities. They involve advanced assessment of health, diagnosis, managing diseases, health awareness and promotion, referral skills, advising diagnostic tests, medications, and treatment strategies, admission and discharge plans, patient case management, teamwork in practice, healthcare service evaluation, and research.<sup>25</sup> Another study describes about APN role as the primary/direct care role being done was education, advising, and counseling, with assessment and diagnosis and formulation and maintenance of treatment.<sup>26</sup>

The fourth sub-theme was the importance of advanced practice nursing. This sub-theme was supported by a study in 2016 by Grey et al., which describes that several factors have been discovered for these new

roles, but two stand out: the first is a decreased amount of doctors as well as 'doctoring' hours offered for contributing to healthcare provision; and the second is an increase in the number of elderly individuals with complex medical conditions, who require novel and creative responses beyond the boundaries of medicine.<sup>27</sup> The study of Lisbeth and Ann shows that New responsibilities for nurses must emerge not just from patient demands, but also from the requirements of health-care institutions. In several countries, the lack of GPs is the impetus for developing the APN function. However, in several countries, access to healthcare services, particularly primary care, is an even more prominent motivation for nurses to expand their scope of practice.<sup>28</sup> Finally, advanced practice nursing is the need of time, they must gain knowledge and skills, they have a variety of roles, and they have a pre-specified job description.

### **Anticipated challenges and issues in introducing APN**

In the theme anticipated challenges and issues in introducing advanced practice nursing, there are four sub-themes: misperceptions about APNs, intra-professional deficiencies, inter-professional hurdles, and lack of planning and resources in the health care system.

In the study, participants highlighted some confusion and misperceptions regarding advanced practice nursing. These misperceptions and confusions were created by electronic and social media and consequently, inter-professional conflict was cropped up. A study conducted in United States supports the findings of this study as it shows that misconceptions have been attributed to media representations of nurses, high school career counselors' lack of familiarity with the nursing role, and an overall perception of nursing as a more supplementary, caregiving role that is less professionally autonomous.<sup>29</sup> Another study conducted in Switzerland shows that there is a need for clarification of the scope of practice and regulations.<sup>30</sup> The study findings also show that intra-professional deficiencies might be a hurdle for advanced practice roles because there are lots of leg-pulling and conflicts related to job responsibilities. Moreover, nurses are creating problems for their colleagues. These findings were supported by a study by Godfred O. Boateng that shows intra-professional conflicts as the majority of the conflict revolved around the position as well as who was responsible for overseeing it.<sup>31</sup>

The study findings also explore the sub-theme about inter-professional hurdles that could be the major barrier to advanced practice nursing roles, the cause is the unawareness of doctors about advanced practice nursing. A study conceptualized the APNs' experiences with doctors' knowledge about advanced practice nursing roles which shows that most doctors are unaware of the significance of an APN, particularly in primary care settings. Yet, they also admitted that they do sometimes not know what their role includes and that its evolution is a continuous process.<sup>32</sup>

A study by Wilson-Ali et al. also supported the current finding of the study and showed that among those doctors who had no prior experience working with APNs, there was a widespread perception that current nurse training was insufficient for an advanced role.<sup>33</sup> Those who are concerned with nurses' competencies, including training and scope of duty, and those who are concerned with structural and organizational hurdles.<sup>33</sup> In the current study the participant stated that physicians are confused about the APN. These findings were supported by a study that revealed the significant obstacle to productive collaboration was a lack of physician awareness about the scope of practice of NPs.<sup>34</sup>

Lack of resources and planning expressed by participants could be the hurdle to the commencement of advanced practice nursing in Pakistan. A similar study shows that the Pakistani healthcare system is not competent nor sufficient in scope to serve the country's expanding population. Lack of resources, ineffective and inefficient use of those resources, inconsistent quality of services, insufficient and unjust distribution of government resources allocations to healthcare facilities.<sup>11</sup>

### **Potential Benefits of Advanced Practice Nursing**

The third theme has four sub-themes that show that the APN will benefit hospitals, people of the community, doctors, nurses, and the nursing profession. The majority of the participants stated that it would

reduce the hospital burden and that minor diseases would be treated at the community level. Moreover, advanced practice nursing will be beneficial for patients and the community as well. It will provide cheaper and door-step care to the patient with greater patient satisfaction. A research project supported the study carried out for homebound heart failure patients who were seen by APNs. The study expressed that NP visits resulted in a 50% reduction in hospitalizations within three months for chronic patients. The program's results show a considerable drop in hospital resource consumption and healthcare expenses, as well as a significant increase in patient overall health and well-being. Patients felt grateful to get care in the comfort of their own homes.<sup>35</sup>

In the study findings, it is elaborated that there could be potential advantages for doctors as well. The APNs will reduce their burden inside the hospital as well as in peripheries at the primary level. These findings are supported by a study that shows that recruiting NPs and enhancing their scope of work to include diagnosis, medicine prescription, consultations, treatment, and other services could ease some of the burden placed on physicians.<sup>36</sup> The study also supports that APNs will help in the promotion of nursing knowledge through intra-professional education and it will enhance nurses' morals. The study is supported by a qualitative study carried out in Canada, which shows that advanced practice by demonstrating professionalism and having a vision for nursing practice, nurses in this research acknowledged "enhancing the quality of nursing practice, bringing an elevated degree of professionalism to their nursing practice."<sup>37</sup>

### **Required Qualification and Competencies of Advanced Practice Nursing**

The fourth theme of the study included four sub-themes, which are qualification and, Speciality courses/ tract system, training/ resident-ship under doctors' supervision, and competency exam/licensing. The participants of the study pointed out that the qualification should be a master's degree in nursing (MSN), along with some specialty course or some residency program in a hospital under doctor supervision. Some mentioned that period in hours and some of the participants said it in years. A review was done regarding APN qualification and a variety of countries were compared. about 70% of countries having APNs have formal training programs for this position. Almost all of them are based on master's degree level university coursework, which coexists with other post-graduate courses in half of the cases.<sup>38</sup> The study further elaborates on the qualification APNs in Australia and New Zealand, both countries have the requirement a university master's degree is necessary for entry into the NP job.<sup>38</sup>

Similarly, another study expressed that the standard curriculum comprises the prerequisite courses necessary for associate's degree and diploma programs, as well as an in-depth concentration on science, nursing research, public health, and clinical training. A nurse with a bachelor of science in nursing must complete an additional 500- 700 hours in clinical supervision to become a nurse practitioner.<sup>39</sup> A study explored that the clinical nurse specialist and nurse practitioner positions are the two types of APN professions technically recognized in Canada. Both are clinical positions that need a master's degree.<sup>37</sup>

The third sub-theme is regarding training under doctor supervision. The participant pointed out that initially, there would be problems with APN training, and there is a need to get help from doctors to train them under supervision at the tertiary care level. These findings are similar to the study which shows that inadequate support, along with excessive demands and challenges in working relationships in a diverse healthcare team, has the potential to endanger this position's accomplishments. Without adequate professional nursing support systems, APNs must rely on doctors for their primary professional supervision.<sup>40</sup> Similarly, in another study the participants stated that they received good supervision from doctors, while it was discovered that APNs working in communities were at risk of not receiving such support. Positive well-being was aided by good clinical supervision.<sup>41</sup>

The majority of the study participants stated that there must be a competency exam and licensing after completing a master's degree and clinical training. These findings were supported by the study findings which show that qualifications might entail (a) graduating from a recognized or approved university, (b) qualifying

for a competency exam or set of assessments, and (c) obtaining a specified period of work experience.<sup>42</sup> Moreover, certification aims to guarantee that an individual has mastered a body of information and gained abilities in a certain area.<sup>42</sup> Another study shows developing competencies enable the APN to integrate specific medical treatments into professional nursing practices. Competencies can be tested in a variety of methods, the most popular of which are a written exam and/or an intellectual evaluation.<sup>43</sup>

### **Strategies for Commencement of Advanced Practice Nursing**

The fifth theme of the study: strategies for commencement of APN consists of four sub-themes. These are solutions for the barriers, piloting and evidence-based practice, proper regulation and monitoring, evaluation, and feedback of the community. majority of study participants showed their concerns regarding barriers in the initiation of advanced roles. They emphasized the provision of strategies to overcome the barriers. They expressed that the PNC has to talk on the council level and clarify the confusion with PM and DC, that APNs are not the replacement of doctors and they will work parallel and in collaboration with doctors. A study conducted by Maylone2010 shows that collaboration with physician colleagues is rated moderate to high by NPs. The collaboration demonstrates both aggressiveness and cooperativeness. Collaboration may be utilized to foster working connections and offer high-quality patient care.<sup>44</sup>

The majority of participants stated to take feedback from people in the community and to evaluate their level of satisfaction. That will create evidence-based data for advanced practice roles so we can show people that they are working well and the people are satisfied with the advanced roles. Similarly, to these findings in the literature, the researchers created a novel self-reported approach to assess patient satisfaction and discovered comparable results when comparing treatment given by NPs to that given by physicians. Despite this, the study found that NPs excelled over doctors in educating, addressing questions, listening, and even management of pain.<sup>45</sup> A Study carried out in Switzerland shows that the evaluation framework's ultimate goal is to promote the best possible health for patients and families while also providing high-quality, focused on patients.<sup>46</sup> A study explored that several sources of quality measurements may be utilized to demonstrate the impact of NP care. The requirement to show results of NP practice is a continuing focus area, independent of the clinical practice environment, including diagnosis, treatment, preventive services, and rehabilitation.<sup>47</sup>

### **Implications**

This study has several implications for the healthcare system, community, nursing profession, and policy development in Pakistan.

#### **Implications for the Healthcare System:**

The study highlights the importance of inter-professional collaboration, which can improve care coordination and patient outcomes. APNs can play a vital role in enhancing healthcare delivery, especially in areas with limited access to medical professionals.

#### **Implications for the Community:**

APNs can provide cost-effective, high-quality care at the community level, improving patient outcomes and reducing the overall burden on the healthcare system. Their focus on preventive care and early intervention can be particularly beneficial for managing chronic diseases.

#### **Implications for the Nursing Profession**

The findings of the study could enhance the recognition and respect for the nursing profession in Pakistan. By demonstrating the critical role of APNs in improving healthcare outcomes, the study may help elevate the status of nurses among policymakers, healthcare organizations, and the general public.

#### **Policy Development Regarding Nursing Profession Evolution**

The study could influence healthcare policy and regulations in Pakistan, particularly concerning the scope of practice for APNs. By aligning regulations with international standards, the study may contribute to the evolution of the nursing profession in the country.

## Recommendations

- **Policy Review:** Policymakers should review and update the scope of practice regulations for APNs to align with international standards.
- **Advocacy:** Nursing associations should advocate for legislative changes that support the full utilization of APNs.
- **Education Programs:** Nursing education programs should be updated to provide comprehensive and specialized training for APNs.
- **Quality Improvement:** Healthcare organizations should encourage APNs to participate in quality improvement initiatives.
- **Public Awareness:** Campaigns should be launched to educate the public about the role of APNs.
- **Funding:** The government should allocate funding for the development and expansion of APN programs.

## Limitations of the Study

This study is the first of its kind in Pakistan, but it has certain limitations:

- **Sampling:** The use of purposeful sampling limits the generalizability of the results.
- **Participant Number:** A limited number of participants may not fully represent the range of stakeholder viewpoints.

## Conclusion

In conclusion, this study on stakeholders' perceptions of advanced practice nursing in Pakistan indicates a complex and dynamic landscape. While there are challenges to overcome, there is also a rising understanding of the importance of advanced practice nurses in enhancing healthcare access, quality, and patient-centered care. These findings provide the groundwork for future discussions, policy changes, and developments in the field of advanced practice nursing in Pakistan.

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