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Evaluation of an International Program for Nurse Practitioner Students

Authors:

Dr. Mary K. Steinke, RN, APN-C, DNP* is an adjunct faculty for the FNP Track at the School of Nursing at Indiana University in Kokomo, Indiana

Dr. Melanie Rogers, RGN, ANP, PhD is the University Teaching Fellow for the Advanced Clinical Practitioner MSc routes at the University of Huddersfield, England

*Corresponding Author

Dr. Mary K. Steinke, RN, APN-BC, FNP-C, DNP

Indiana University Kokomo

Kokomo, Indiana

Email: msteinke@iuk.edu

Background: There are few opportunities for student nurse practitioners to develop relationships and exchange ideas with international counterparts. In addition, discovering differences in instructional pedagogy between programs are beneficial for every student.

Purpose: To facilitate an international understanding of healthcare services and compare curricula of advanced practice programs through an international experience for year one nurse practitioner students from the United Kingdom to the United States of America.

Methodological orientation: The study utilized a qualitative analysis of responses from specified questions provided to both cohorts of students prior to and after the experience.

Sample: A virtual global exchange between 23 advanced practice students and their professors in the spring of 2018 culminated in a trip by the UK students and faculty to the U.S.A. in April of that year.

Conclusions: UK and US NP students positively evaluated the international encounter and pointed out specific educational activities that were most helpful to their training.

Implications for practice: International experiences offer nurse practitioner students the opportunity to experience healthcare delivery in an alternative cultural milieu

Keywords: student nurse practitioners, curricula, healthcare services, international experiences

Evaluation of an International Program for Nurse Practitioner Students

Nurse Practitioner students are trained to become “autonomous clinicians who are able to diagnose and treat conditions based on evidence-informed guidelines” (Schober et al. 2020, p. 26). Despite the fact that each country’s practice is defined by its own regulatory practices and professional practice, “a master’s degree at a post-graduate level is considered the minimum standard for entry level NP practice” (Schober et al. 2020, p. 20). The United Kingdom (UK) and United States of America (USA) both have established Nurse Practitioner (NP) curricula training NPs to work at high levels of advanced practice (Maier, Aiken & Busse, 2017). Both countries promote the optimal scope of the role and recognize the value to the healthcare workforce. Both countries include in their curricula supervised clinical practice, requiring a minimum of 500 supervised clinical hours (NONPF 2020, RCN 2008/18a).

The aim of the study was to facilitate an understanding of healthcare services and compare curricula of advanced practice programs through an international experience for year one Nurse Practitioner (NP) students from the United Kingdom (UK) and the United States of America (USA).

Global Exchanges

There is a dearth of literature about NP global exchanges. Maas et al. (2012) identify that they teach one of the few NP curriculums that has an international experience, which is mandatory for their students. They suggest these opportunities for NP students promote a sharing of knowledge and problem solving as patient presentations and disease progression have “no border”. Global exchanges are a unique opportunity for NPs to think outside of their own culture and healthcare and recognize the similarities and differences of the role in another country (Maas

et al., 2012). Tang (2007) echoed these suggestions and identified that mutual trust develops during an exchange, which can cultivate NP student talents and offer them a global vision for healthcare. (Ter Maten & Maas 2009) recognized that global exchanges enable NP students to have a greater understanding of how other health care models deliver care and identify some of the barriers and strategies implemented in another country to improve patient care, as well as develop leadership skills. Global exchanges are usually reciprocal.

Additional works can be found in the general nursing literature supporting global exchanges as ways of enabling nurses to develop cultural competencies (Hovland et al., 2019; Browne et al., 2015). Nursing students benefit from an understanding of how nurses care for people's health from a global perspective and an exchange is one way of developing this (Hov et al., 2018). Global exchanges were recommended by Ortega et al. (2016) due to the transformational aspect of the experience from an alternative healthcare system that can make an important difference to the nurse's ongoing career.

Methods

This study utilized mixed methodology which collected data about students' responses during two virtual meetings and a physical visit for UK students to the USA and also through an online Likert survey which reported data on diagnostic reasoning (reported elsewhere). The Bristol online survey (Bristol Online Survey Tool 2018) was used to obtain demographic data such as age, gender, profession, years in clinical practice and current specialty in addition to diagnostic reasoning data. Data related to the international program were thematically analyzed.

First year students in a MSc Advanced Clinical Practice (NP) program at a university in a northern town in the UK and first year students in a MS Family Nurse Practitioner program at a university in a mid-west town in the USA were invited to participate in two virtual meetings using Zoom video communications software, one each in February and March, 2018. Faculty designed five questions for the student participants to answer in the first virtual session (Table 1) for the purpose of learning more about the education and training of nurse practitioners in their respective countries. The students determined their own five questions based on their interests for the second session (Table 2). The sessions were conducted at a set time, taking into account the time differences. Students were allocated by faculty in their respective universities to one of four participant groups with a view to provide an equal mix of clinical backgrounds across each group. Following the sessions each group was asked to submit a report of the answers to the questions from the first and second virtual sessions (Appendix I).

Two months after the virtual sessions 11 UK NP students plus two faculty visited 13 USA students and their faculty. The UK students participated in, a tour of an emergency room, informal simulated patient scenarios, “shadowing” an NP, and classroom teaching discussed healthcare-related issues with the USA students.

The simulated patient scenarios included common adult health-related problems. All of the voluntary actor ‘patients’ were prepared ahead of time with information about their problem, including props, laboratory and x-ray reports where needed (Figure 1). The ‘patients’ were placed in separate rooms, and the students were given approximately 30 minutes to assess, diagnose and manage each one. Each UK student was paired with an American student to review the patient and they rotated to the next ‘patient’ via a moderator. Faculty rotated around

each patient to observe the students. The students were evaluated by each volunteer actor by means of a short questionnaire (Figure 2).

Each UK student also participated in a clinical practice placement with a qualified experienced USA NP to gain knowledge of the role and scope of practice. These placements included areas such as: dermatology, orthopedics, cardiology, urgent care, primary care and home visits to the disabled. On the final day of the global exchange the UK students attended the 44th National Organization of Nurse Practitioner Faculties (NONPF) conference to experience a large national NP conference.

Following both parts of the exchange a survey was sent to all participants via Bristol Online Survey to evaluate the global exchange (Bristol Online Survey Tool 2018). This survey included demographic questions as well as a diagnostic thinking index questionnaire (reported in a separate paper, currently under review) to evaluate their diagnostic reasoning skills at the early point in their clinical training.

Ethical Considerations

Ethical approval was obtained from the two University ethics panels. The informed consent and study information was sent to both student cohorts, including those who did not participate in the physical global exchange. The information also included a sentence regarding the survey data that would be collected and stored securely with password protection on a server in one of the universities.

Results

Demographic Survey

Twenty-three students responded to the demographic survey, 95% were nurses, one student was a paramedic. The majority (87%) were female, most (74%) of the respondents were between 34 years old and 41 years old. Approximately 34% had 5-10 years of clinical practice and 43% had 12-15 years of experience post-initial qualification respectively. The reason a paramedic joined the international program was because in the UK NP training is normally undertaken with other health care professionals leading to the title Advanced Clinical Practitioner (ACP). These professionals typically include paramedics and pharmacists, as well as others. The curricula is based upon traditional NP training and education. On completion of the training the title of ACP is awarded however, many nurses still choose to use the title Advanced Nurse Practitioner (ANP) denoting their nursing values

Clinical placements were part of each curriculum; the students from the USA who were in a family practice program were placed in clinical areas relevant to family practice while the UK students who were part of an advanced clinical practitioner program identified placements in family practice, emergency care, general surgery, orthopedics, critical care, acute dialysis, cardiology and gerontology.

Virtual exchange

More than half of the students (57%) thought the virtual exchange (using zoom technology) was easy or very easy (zoom video communications 2018). Even though there was a five-hour difference in time, more than 56% of the students thought the time and technology

were either appropriate or most appropriate and worked well. The majority (83%) of the students thought that the virtual discussion met the aim of the project.

First discussion questions

The five qualitative questions were determined by the faculty to encourage the students to compare and contrast the educational and clinical practices specific to advanced practice in their countries (Table 1). The students were asked whether the questions appropriately met the aim of the project. They were also asked if they would recommend this type of project for future students. Greater than 50% of the students indicated that the questions met the aim and 91% would recommend this type of project.

Second discussion questions

The students from each group developed questions to ask each other. The details of the questions and answers are available in Appendix I. The majority (70%) indicated that the questions provided good insight into advanced practice in their respective countries. The most helpful things all of the respondents learned from the discussions included the structure of the healthcare delivery models in each country and the roles and experience required for advanced providers. There was also discussion of how the NP stays competent after graduation, and consideration of including other professions in the NP programs such as pharmacists and paramedics which is commonplace in the UK.

Some of the improvement suggestions for future participants included the zoom link to be more efficient, more observation of the UK approach to assessment, history taking, and diagnosis during the laboratory.

Key themes

Curriculum

The modules taught for each cohort were similar with some minor differences. For example, both curricula had similar competency expectations (RCN 2018b, NONPF 2012), the use of the Objective Structured Clinical Examination (OSCE) is employed in the UK clinical program as a summative assessment, and pre-clinical OSCEs and standardized patients are utilized in the USA program as formative assessments. Clinical placements varied with students in the UK having the same placement and clinical educator for the duration of the course while USA students had rotations of seven weeks in a variety of placements. In the UK students undertake alternative placements and specialties for experience; however, their clinical educator is the only clinician to assess their clinical practice.

“The main difference being [US] students are allocated different clinical educators to spend 6 [sic] week periods with. In our training we have the same educator throughout there are positive and negatives in each establishment.”

Healthcare Differences

Healthcare differences were identified by all of the students. It was clear that the UK students felt the National Health Service (NHS) was superior to the USA healthcare system which they viewed as mainly private.

“I think the level of care varied greatly due to America providing a private health care system. But it did concern me how those that could not afford to pay accessed quality health care.”

“Overall it brought to light that there are positives and negatives in each health care system. However overall I think it showed that the NHS is something that as a country we should support and do our utmost to retain this service.”

Simulated Exam Experience

The simulated experience the students received was in the form of volunteers who were given a script of a make-believe patient with a clinical problem in which the students had to determine through a history and physical exam what the problem was and how to treat it. It was previously incorporated into the laboratory learning sessions for the USA students and was included in the international experience. The UK and USA students were paired up to interview a ‘patient’. The UK students enjoyed this activity and thought it would be beneficial in the future to help prepare them for their OSCEs .

“In America,[NP]) students get to assess ‘simulated patients’ whilst at university. These are real people which are told the symptoms of a particular disease which they relay as you, the practitioner, gain a good history. There is also the opportunity to interpret blood results and other investigations that may have been ‘completed’. I think this is a great way of learning. Made all the more powerful when you have the opportunity to see these patients with lecturers looking on and providing valuable feedback.”

“Having real-time patient simulations in the classroom was extremely useful. I really enjoyed this experience and found it very valuable. The constructive feedback from a patient perspective was invaluable and I have tried to incorporate it into my practice.”

Evaluation

Students evaluated the study positively and have requested further exchanges to be facilitated. The students who came from the UK felt a week together had enabled them to *“support each other more closely”*.

“I found the [USA] exchange an amazing opportunity for myself and as a group. We were able to bond as a group and have amazing friendship which has proved invaluable in preparing for exams etc. I think it has been amazing to see how healthcare varies across the globe and how other [NP] programs differ or compare”

The students also identified that the exchange has helped them develop many ideas about global research projects, which they could undertake in their final year of NP study.

Discussion

This study analyzed findings related to a UK to USA international encounter. The responses from the students were very positive overall. The students gained insight into each other’s healthcare system and learned how the role of the NP was utilized in each country. The comments made by the respondents were included as they contributed richness to the data including personal perspectives of the international experience. The UK students expressed that having to diagnose and treat the ‘simulated patients’ in conjunction with their USA counterparts

was helpful preparation for their upcoming exams. Simulation is incorporated in both country's advanced practice programs. In 2016, the National Task Force (NTF) on Quality Nurse Practitioner Education recommended using simulation 'to augment the clinical learning experiences, particularly to address the high-risk low-frequency incidents' (National Task Force 2016, p. 12) only over and above the required minimum 500 hours of direct patient care clinical hours. In the UK, OSCE is a form of simulation used as a means of assessing students within both preregistration and post qualifications/postgraduate nursing education (Rushforth 2007). The RCN includes it in its assessment strategy of advanced level nursing practice (RCN Competencies: Standard 13 2008, p. 32).

Ultimately, internationalization is integral to the strategic planning exercises of universities worldwide, and nurses with international experiences are increasingly taking a leadership role (Allen & Ogilvie, 2004). Learning about nursing models in various countries can help nurses understand global health concerns and professional issues (Lange & Ailinger, 2001). Being autonomous and practicing at a high level of scope of practice as an NP has been found to be both rewarding and challenging (Steinke et al. 2018). Observing how other NPs practice globally can identify positive and undesirable aspects of healthcare systems were acknowledged in this exchange.

Study Limitations

The international experience was unidirectional with only the UK students spending one week with their US counterparts. In order to get a more complete perspective of the healthcare systems in each country, it would be helpful for the students to spend an equal amount of time in each other's country. The NP student cohorts were small and the student activities were meant to

be informal as this was the first global experience of its kind between the universities, therefore limited conclusions can be drawn.

Response bias was a consideration as the researchers were also the NP program leaders who participated in the exchange.

Implications for Nurse Practitioners and Health policy

The role of the Nurse Practitioner exists in over 33 countries in the world (Maier, Aiken & Busse 2017). It is well recognized that NPs continue to transform healthcare provision in the UK and USA. However, NPs have reported that they are underutilized and undervalued in their jobs (Steinke et al 2018). More detailed research into whether NPs are practicing at the highest level of their training will be essential for the development of the role further.

Due to the intense curriculum needed to develop the skills to work as an NP there is often little time to develop a global perspective of advanced practice. Nurse educators must lead the way to help nurses make connections with others from other cultures (Riner 2018). Offering an international opportunity for students to learn from their peers in another country in terms of education and training will only raise their level of knowledge and skill once they have graduated. The importance of developing collegial relationships should be encouraged at this level.

Simulation exercises using volunteers to act as patients is a relatively effortless way to help NP students learn how to 'approach' a patient in an organized fashion and therefore hone their diagnostic skills. The simulated clinical experience permits the application of clinical judgment and critical thinking towards successful diagnostic and therapeutic reasoning (Ribeiro

et al. 2018). Combining OSCEs and voluntary ‘patients’ could provide a more significant student experience.

References

- Allen, M., & Ogilvie, L. (2004). Internationalization of higher education: Potentials and pitfalls for nursing education. *International Nursing Review*, 51 (2):73-80.
<https://doi.org/10.1111/j.1466-7657.2003.00226.x>
- Bristol Online Survey Tool (2018). Retrieved from: <https://www.onlinesurveys.ac.uk>
- Browne, C., Fetherston, C., & Medigovich, K. (2015). International clinical placements for Australian undergraduate nursing students: A systematic thematic synthesis of the literature. *Nurse Education Today*, 35(10): 1028-36. [doi: 10.1016/j.nedt.2015.05.012](https://doi.org/10.1016/j.nedt.2015.05.012).
- Hov, R., Kvigne, K., Aiyub, I., Gillund, M., Hermansyah, H., Nordström, G., Rystedt, I., Suwarni, A., Trollvik, A., Wilde-Larsson, B. & Høye, S. (2018). Nurses' contributions to health: Perceptions of first-year nursing students in Scandinavia and Indonesia. *Nordic Journal of Nursing Research*, 38 (4) 187-195.
- Hovland, O., & Johannesen, B. (2019). Nursing students develop cultural competence during student exchanges in Tanzania. *Norwegian Journal of Clinical Nursing*. Sykepleien Forskning 1-17.
- Lange, I., & Ailinger, R. (2001). International nursing faculty exchange model: a Chile-USA case. *International Nursing Review*. <https://doi.org/10.1046/j.1466-7657.2001.00070.x>.
- Maas, L., Ezeobebe, I., & Tettero, M. (2012). An American and Dutch partnership for psychiatric mental health advanced nursing practice: Nurturing a relationship across the

ocean. *Perspectives in Psychiatric Care*, 48, 165-169. <https://doi: 10.1111/j.1744-6163.2011.00319.x>

Maier, C., Aiken, L., & Busse, R. (2017) *Nurses in Advanced Roles in Primary Care: Policy Levers for Implementation*. The Organisation for Economic Co-operation and Development (OECD) Health Working Papers (98). OECD, Paris.
<http://dx.doi.org/10.1787/a8756593-en>

National Task Force on Quality Nurse Practitioner Education. (2016). *Criteria for evaluation of nurse practitioner programs*, 5th edition. Washington, DC: National Organization of Nurse Practitioner Faculties retrieved from
<https://cdn.ymaws.com/www.nonpf.org/resource/resmgr/Docs/EvalCriteria2016Final.pdf>

National Organization of Nurse Practitioner Faculties (2012). *Nurse practitioner core competencies* retrieved from <https://www.aacn.org/~media/aacn-website/certification/advanced-practice/npcorecompetenciesfinal2012.pdf?la=en>

National Organization of Nurse Practitioner Faculties (2020). *Statement regarding nurse practitioner students and direct care clinical hours* retrieved from
https://cdn.ymaws.com/www.nonpf.org/resource/resmgr/board_resources/20200323_statement_on_np_s.pdf

Ortega, J., Mitchell, E., McKim Peragallo, N. (2016). *Beyond borders: Global nursing education for the future*. *Nursing Education Perspectives*. 37 (4) 227-229.

Royal College of Nursing Competencies (2008). Advanced nurse practitioners – an RCN guide to the advanced nurse practitioner role, competencies and programme accreditation retrieved from <http://aape.org.uk/wp-content/uploads/2015/02/RCN-ANP-guidance-document-2008.pdf>

Royal College of Nursing (2018a). Practice experience. Advanced level nursing practice section 3: RCN accreditation and credentialing retrieved from:
<https://www.rcn.org.uk/professional-development/publications/pub-006897>

Royal College of Nursing (2018b). Advanced level nursing practice: Introduction retrieved from: <https://www.rcn.org.uk/professional-development/publications/pub-006894>

Riner, M. (2018). Global health nursing : Making connections by embracing the other. *The Journal of Continuing Education in Nursing*, 49, (3), 99-100.
<https://doi.org/10.3928/00220124-20180219-01>.

Ribeiro, V., Garbulo, D., Zamariolli, C., Eduardo, A., & Carvalho, E. (2018). Clinical simulation and training for Advanced Nursing Practices: an integrative review. *Acta Paul Enferm*, 31(6): 659-66. [doi:http://dx.doi.org/10.1590/1982-0194201800090277](http://dx.doi.org/10.1590/1982-0194201800090277)

Rushforth, H. (2007). Objective structured clinical examination (OSCE): Review of literature and implications for nursing education. *Nurse Education Today* 27, 481-490.

Schober, M., Lehwald, D., Rogers M., Steinke, M., Turale, S., Pulcini, J., Roussel, J., & Stewart, D. (2020). International council of nurses guidelines for advanced practice nursing.

Geneva, ICN. Retrieved from https://www.icn.ch/system/files/documents/2020-04/ICN_APN%20Report_EN_WEB.pdf

Steinke, M., Rogers, M., Lehwaldt, D. & Lamarche, K. (2018) An examination of advanced practice nurses' job satisfaction internationally. *International Nursing Review*. 65(2),162-172. <https://doi.org/10.1111/inr.12389> Epub 2017 Jun 28.

Tang, W. (2007) International collaboration to develop a nurse practitioner master's program. *Journal of Nursing* 54(6) 16-21 (Chinese only)

Ter Maten, A., & Garcia- Maas, L. (2009) Dutch advanced nursing practice students: Role development through international short-term immersion. *Journal of Nursing Education* 48(4), 226-231.

Zoom video communications (2018). Retrieved from <https://zoom.us/>

Figure 1

Example of patient scenario and instructions to the 'patient' for NP students in their first clinical rotations

Name: JB DOB: 9/9/70

PMH: Diabetes type 2; diabetic neuropathy

PSH: none

SH: Single, smokes 1 pack of cigarettes a day, no alcohol, no illicit drugs, works for the FBI

FH: Mother – alive with diabetes; father – deceased from lung cancer

Meds: Glipizide 10mg. once a day; Metformin 500 mg. twice a day

Allergies: None

Immunizations up to date

CC: sore on foot – you can elaborate

HPI: You do not remember stepping on anything, but noticed your right foot was red, and there was some drainage on your sock yesterday. You don't have any feeling in your feet, and you have diabetes so you thought you should have someone look at it as you can't see it, it is on the bottom of your foot.

Physical Exam: T – 99, AHR – 90, RR – 16, B/P 162/100 (**this information provided to the student**)

General: Act alert, slightly anxious, and oriented to your surroundings

Respirations: exhibit normal breathing

Heart: normal rate

Right foot: open wound on sole of foot with drainage*. Foot slightly red, not tender (you can't feel anything).

Differential Diagnoses: the students should consider these

Diabetic foot ulcer

Infection/cellulitis

Burn

Likely diagnoses – cellulitis due to infected wound; diabetic neuropathy

Additional diagnoses - tobacco use, hypertension

They should ask you some of the following questions:

How long has the numbness been present?

Did you clean the wound?

Have you ever had a wound like this before?

Have you considered stopping smoking?

They should give you a plan, such as what medications to take (antibiotics) and educate you on the medications, treatment plan and follow up.

Terms:

PMH: past medical history

PSH: past surgical history

SH: social history

FH: family history

CC: chief complaint – this is what you are coming to see the nurse practitioner for

HPI: history of present illness – this is the story you will tell them

Props: *wound on foot; please arrive 15 minutes early to be fitted for your "wound"

Figure 2

Standardized Patient Evaluation of Student(s)

Student(s) Name(s) _____

“Patient’s” Name _____

- | | | |
|--|-----|----|
| 1. Did the student(s) conduct a thorough history? | Yes | No |
| 2. Did the student(s) conduct an appropriate physical exam? | Yes | No |
| 3. Did the student(s) review your medications with you? | Yes | No |
| 4. Did the student(s) determine the correct diagnosis? | Yes | No |
| 5. Did the student(s) prescribe the correct treatment(s)? | Yes | No |
| 6. Did the student(s) give you educational literature regarding your condition? | Yes | No |
| 7. Did you have to help the student(s) more than 50% of the time with any part of the history, physical, diagnosis or treatment? | Yes | No |

If yes to #7, please indicate below what the student(s) needed help by you

Any other comments you would like to share:

Table 1

Initial Questions by NP faculty and Evaluation Questions of the Global Exchange

1. How in your country are Education, Leadership, Research and Clinical Practice integrated into your programme. Is one aspect focused on more than another?
2. Is there a national standard for these areas to be taught in your programme?
3. Are your roles for advanced practice regulated, if so how was this established? If not does this create any issues for practice?
4. How has your country developed the role of Advanced Practice?
5. What amount of time is spent in clinical practice and how is this facilitated?

Table 2

Advanced Clinical Practitioner Global Exchange Evaluation using a Likert scale

1. How easy was it to find the time for this virtual exchange?
2. Considering this is a global discussion across two different time zones, do you think the time was appropriate?
3. How well did the technology work (Zoom)?
4. The aim of the project is for “inter-professional collaboration to understand and compare advanced practice in another country”. How well did this virtual discussion meet this aim?
5. The questions for the second discussion were set by yourselves. Did the questions you asked provide helpful insight into advanced practice in another country?
6. Would you recommend participation in this project by future students?

Appendix I.

Examples of Answers to Questions between Student Groups via Zoom

Questions from USA students to UK students

How is your practice licenced and regulated?

The majority of us are registered as nurses, however there are other roles including pharmacists and paramedics who have different regulatory bodies. As a nurse we are requested to revalidate to evidence competencies, however this is not yet required for the ANP post, (which is in development).

When you qualify as an ANP (Advanced Nurse Practitioner), will you move from the current practice or stay?

We will more likely stay within primary care but move around within secondary care. There is no obligation to stay, and if a post was advertised we could apply. We are trained as part of the ANP course generally not in a specialty, however some people do work within specialist arenas.

Is medical service fee for service?

UK: It is free for everyone who is a British citizen and emergency care for anyone even if visiting the UK. NHS is a government service with free healthcare in the UK.

How long would you have to wait for elective surgery?

UK: 18 weeks maximum is the target to wait for elective surgery, but 2 weeks wait for fast track suspected cancers.

What is your salary?

It is variable within the role. As a training ANP, possibly between £36,000 - £41,000 (approximately \$45,000 - \$51,000). As a qualified ANP, possibly between £41,000 - £55,000 (approximately \$51,000 - \$67,000)

This was reported to be more negotiable within the community and more rigid in secondary care.

Questions from UK students to USA students

What are your motivations for becoming an ACP?

USA student: I was used to being at bedside but wanted to do more and be more involved in patients care. Nurse practitioners get more time than physicians with patients 20-minute appointment or if a new patient not seen before 40 minutes, this allows much more time for health promotion and exploring the patient's condition and mental health.

USA student: I love the mystery of a diagnosis and being able to make a difference with health promotion and help prevent disease.

Are there any opportunities to become advanced practitioners for other health care professionals like in the UK?

USA: There is very similar role called Physician Assistant for other health care professionals to do, this role seems to be more regulated than the NP role.

How has the role of the AP changed over last 10 years in America?

USA: There is more independence and autonomy but it depends on which state you are working in. In our state, we must still collaborate with a physician.

What is your salary?

A registered nurse in our area (Midwest) earns \$50,000 - \$60,000

As an ANP, we could possibly earn \$92,000 - \$120,000 (equivalent to £65,000 - £86,000), however we have to pay higher rates of health insurance.

How do you revalidate?

Different states have different laws, and nurses have to present evidence of ongoing education to maintain license to practice. This is in the form of 250 questions which is a test (board certification) we have to pay before we can practice. There is a separate qualification to prescribe narcotics and other drugs. The fee to prescribe narcotics costs much more and is highly regulated.

Do you think your course should be available to other professionals such as paramedics?

Yes, however the law says only registered nurses can attend the course. There are other courses such as physician's assistant that are available for other professionals that have any degree in healthcare.

Do you feel well supported?

USA: The University does support us; we are the first group in this course so we feel it is important for it to be successful. In 2020 there will be a shortage of 95,000 physicians just in the region, so it is important for the university to get providers out in the community.

We do not have a set mentor, we rotate every 7 weeks to a different clinic, there are difficulties with gaining rapport and competencies in only 7 sessions with a mentor. Also, there are big switches to adjust to going from pediatrics to cardiology for example. Also, the rotations are not always in line with the body systems being taught at the university so in theory we are learning 2 body systems at once.

We found most rotations are welcoming other than very busy clinics which do not have that much time to teach or make you feel welcome.

Do you have a lot of essays/ assignments to do for each semester?

USA: We have 200-300 pages of reading to do each week. There is a big exam as a final exam next year. Each semester has quizzes and exams more than assignments.

There is a discussion board where we must log on each week to discuss a patient case study as a group. There is a web-based I-human¹ interactive online case study that you work your way through – we do one each week also.

There is a research course which takes two 16-week modules to complete

¹<https://www.i-human.com/>

Is your qualification recognized outside of your state?

The ANP qualification is recognized as it is a national certificate. To practice as a registered nurse, it is required to apply for a license, if the nurse moves to a different state, a new license to practice is required, but not to practice as an ANP (this is not completely accurate as NP licensure is handled at the state level through the board of nursing and will determine whether the ANP requires a new license in that state)

Renewing registered nurse license with a bachelor's degree is required every 2 years.

Renewing the prescribing license is required every 3 years

Questions both groups answered

How are you funding the course?

UK: Health Education England allocates money which the university applies for funding that pays for course. Not guaranteed and unsure how long this opportunity will last in England.

USA: Options for funding are student loans, scholarships, grants or employee education reimbursement programs which give approx. \$4000, however tied into a contract with employee to make time up once qualified however if no place for them once qualified to make time back must pay the employer back in cash.

Course fees are \$9-9500 per year so lots of funding to put towards themselves, however salary once qualified is much better than in UK.

Do you have urgent care centers for coughs and colds?

UK: Yes, we have walk in centers for minor illnesses and minor injury units- these are still free of charge to use and obtain a review.

USA: Most places must pay a fee before any treatment, have separate insurances for healthcare, dental, vision, pharmacy. We pay approximately \$100 every 2 weeks for this. Nothing is for free.

How have you coped with the transition from being expert in your field to novice?

UK: My sister is in charge on A+E one day, next day she is a trainee ACP. It is difficult for staff to understand how she can be both things.

USA: We have not had that really to worry about as we go into each rotation as new trainee person, not training in our normal place of work at all.