



International Journal of Nursing and Health Care Science

Research Article

Rogers NM, et al. J Int J Nurs & Healt Car Scie 01: 2021-19

Introducing Baccalaureate Nursing Students to Primary Care in a Veterans Health Setting

Norma Martínez Rogers^{1#}, Herlinda Zamora¹, Viola Benavente¹,
Victoria Ditmar¹, Daisy Ornelas¹, Lisa Morant²

¹School of Nursing, University of Texas Health Science Center at San
Antonio - UT Health San Antonio, San Antonio, Texas, USA

²Audie L. Murphy VA Hospital, San Antonio, Texas

#**Corresponding author:** Norma Martínez Rogers, Professor, School
of Nursing, University of Texas Health Science Center at San Antonio
- UT Health San Antonio, San Antonio, Texas 78229, USA

Submission Date: 08 April, 2021

Accepted Date: 27 May, 2021

Published Online: 31 May, 2021

How to cite this article: Rogers NM, Zamora H, Benavente V, et al. (2021) Introducing Baccalaureate Nursing Students to Primary Care in a Veterans Health Setting. Int J Nurs & Healt Car Scie 01(05): 2021-19.

Abstract

This article describes the introduction of baccalaureate nursing students to primary care focused in a veteran's health care setting. Funded by Health Resources and Services Administration, the Advancing Community Oriented Registered Nursing (ACORN) project grant was developed to retain baccalaureate nursing students in community-based primary care nursing focusing on chronic diseases, including mental health. This project focuses on teaching nursing students the critical importance of prevention, health promotion, service navigation, and health education in partnership with the VA community, family, and individuals served. Findings showed the value of interprofessional collaboration to meet the needs in veterans health and teaching. Implications for research are explored.

Keywords: Baccalaureate nursing; Interprofessional collaboration; Primary care; Veteran's health

Introduction

United States (U. S.) veterans are invaluable members of our nation who are honored and provided with health care for life. The number of U. S. veterans is roughly 18 million [1] with nine million veterans being provided care by the Department of Veterans Affairs annually in 170 Veterans Administration (VA) medical centers and 1,074 outpatient settings [2]. Future Registered Nurses (RNs) need to be educated in worldwide, evidence-base standards of care, preventative care, and promotion of health because they will be tasked with broader-ranging and more diverse roles on interprofessional health care teams [3]. It is important for academic institutions and organizations to develop and educate a cadre of health care professionals that can provide U. S. veterans with the highest quality of equitable care considering the uniqueness and diversity of the women and men who have served. In 2020, the COVID-19 pandemic presented many changes and challenges to nursing education and practice. Academic and health care organizations faced the pandemic and patient care with the determination and resilience that not only U. S. veterans, but also the diverse people of our nation, merit.

Background

Our school's baccalaureate nursing education strives to provide excellent learning experiences in the wide-range and full scope of nursing practice for diverse populations. Local hospital and community clinics are vital community partners in the education of our baccalaureate nursing students. After being awarded a Human Resources and Services Administration (HRSA) training grant in 2018, our nursing school initiated the Advancing Community Oriented Registered Nursing (ACORN) project. The chief goal of the ACORN project is to develop and retain Baccalaureate Nursing Students (BSN) who are interested in community-based primary care nursing focusing on chronic diseases, including mental health. The project focuses on teaching nursing students the critical importance of prevention, health promotion, service navigation, and health education in partnership with the community, family, and the individuals served.

Two years into our four-year grant period, ACORN students-five in 2019 and six in 2020, were initially introduced to primary care nursing in the local VA hospital that serves veterans from throughout South Texas. To promote the VA nursing as a career choice and engage nursing students in primary health care at the VA a partnership was developed with our school to implement the ACORN project grant, which aligned with the needs of the veterans.

Many veterans face diverse health issues and difficulty in accessing quality health care because health care providers may not be readily available to them. The local VA hospital was an ideal, primary care starting point because it provides patient aligned care for many disease processes, such as chronic illnesses including mental health. For example, the U. S. Department of Veterans Affairs reported that nearly 25% of their patients have diabetes [4]. Frank, et al. [5] showed that between 2010 and 2016, over 2 million veterans reported incidences of chronic pain with the following diagnoses: 27% back pain, 34% neck and other joint pain, 5% migraine, and 3% neuropathic pain; 19% of these veterans suffered from depression and 14% Post-Traumatic Stress Syndrome (PTSD). ACORN students optimized learning experiences at the VA primary care clinic to increase their nursing knowledge and skills in veterans' health.

Methodology

Students were selected for the ACORN project by writing an essay on what primary care meant for them and being interviewed by faculty supporting the grant. The participants had their first clinical rotations through the *Internal Medicine Clinic (IMC)* at the VA hospital. In preparation for the students' rotation, three RNs from the IMC attended a clinical nursing instructor workshop hosted by our school. These three RNs, in conjunction with the nurse educator and nurse manager served as the anchors for the project at the VA. The students were part of the nursing course *Adult I: Care of the Patient with Chronic Disease* and were also assigned to a Dedicated Education Unit (DEU). The five ACORN student participants individually spent 16 hours with one of the ACORN/VA clinical instructors for a total of 80 hours of primary care experiences for the cohort. Following the successful completion of this first clinical experience, the students completed additional courses in the IMC to include a leadership and management clinical course and a capstone clinical course. In their final semester capstone course, the students completed 120 hours in the IMC working one-on-one with an RN preceptor.

Program Activities

Each student completed assignments based on his/her experiences in the IMC throughout the multiple clinical courses. The students were expected to report on several aspects of their time in the clinic. This included describing processes related to administrative functions, the Patient Aligned Care Team (PACT) [6], technology usage, referrals, mental health, suicide prevention, safety issues, veteran specific health care needs, the RN role on the PACT and several other criteria. In addition, each student was afforded the opportunity to deliver direct care to veterans visiting the clinic in-person, over the phone or on *Skype*. This included telephone triage, basic health screenings, patient education covering topics related to medications, disease processes, wound care, signs and symptoms requiring emergent care, as well as a myriad of other nursing care interventions and evaluations.

Scholarly output based on the ACORN student experiences at the VA IMC was demonstrated in an abstract submission/acceptance and poster presentation at the 6th annual *Cultural Inclusion Institute: Promoting Health and Wellbeing through Social Justice and Cultural Inclusivity*. The poster, titled: "*Veteran Barriers to Accessing Primary Health Care and the Provision Set Forth to Improve Quality Care*" was positively received by conference attendees and was also presented at a variety of other venues.

The ACORN students developed a project promoting VA Video Connect [7], a secure and private videoconferencing platform in which veterans conduct visits with their provider in a virtual medical room using the camera on their phones, computers, or tablets. The project was presented to Veterans in both the VA IMC and one of the free-standing outpatient clinics. The students created an easy to follow poster and handouts for their project. They shared information face to face about VA Video Connect with over 75 veterans and were able to sign up over 40 veterans who were interested in participating. For veterans with iPhones, the students assisted in downloading the app to the phone. The students also created an informational video on the process of signing up and utilizing VA Video Connect for primary care appointments. The project was shared with the VA system.

Post-Graduation

Four of the ACORN graduate RNs were offered fulltime positions in the Veterans Health Care System Primary Care Clinics. This was a major collaboration between our ACORN project and the VA as they usually hired experienced RNs to be in their primary care clinics. Transitioning the new RN graduates into the Ambulatory Care setting has presented both rewards and opportunities. One of the opportunities identified was a reexamination of the Primary Care Orientation processes, ensuring that the PACT model concepts [6] were delivered at a substantial level. This model of care is the underpinning of the RN Care Manager.

Additionally, because the new graduate RNs did not have the secondary and tertiary care experience to assist them in transitioning to the RN Care Manager role, it was critical that each RN was able to recognize and perform under the nine dimensions of Care Coordination as outlined by the American Academy of Ambulatory Care Nurses [8]:

- Advocacy
- Education and engagement of patients and families
- Coaching and counseling of patients and families
- Patient-centered care planning
- Support for self-management
- Nursing process (proxy for monitoring and evaluation)
- Teamwork and collaboration
- Cross setting communication and transition
- Population health management

In recognition of these needs, the new RN graduates were assigned a RN preceptor that attended the formal preceptor training provided by the VA Nursing Education Department. Each new graduate RN is required to remain in orientation for one full year. Additionally, all four graduates were assigned the PACT University curriculum, which combines the PACT model with the nine AACN Care Coordination dimensions [9].

Evaluation

Our university Institutional Review Board (IRB) approved the ACORN project. The project evaluator conducted focus group and individual interviews to collect new RN ACORN alumni that graduated in December 2019 perspectives about nursing education and practice with the barriers and challenges faced during the COVID-19 pandemic. ACORN project participants gave consent to participate in focus interviews and use of their responses and narratives.

Focus Interviews

The six ACORN students' interviews included open-ended questions regarding nursing practice and learning experiences. For example, three of the interview questions were:

- Please talk about situations you experienced in primary care during COVID-19 period.
- What are the challenges you are facing during this pandemic?
- What are your thoughts about the COVID-19 pandemic's impact on primary care?

In January 2020, ACORN students began their veterans' health clinical experiences at the local VA hospital, but transitioned to remote learning at the end of March 2020 due to the COVID-19 pandemic. The students' interview responses reflect how face-to-face veterans' health clinical experiences were suspended in February 2020 at which time they worked online to complete their spring 2020 coursework.

Question 1: ACORN students reported adapting to learning experiences with patients via telehealth. HealthIT.gov [10] underlines HRSA's definition of telehealth as "The use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration." Students conducted patient follow-ups via telehealth: "During the follow up telehealth, we asked patients questions regarding their general conditions, COVID-19 symptoms, and their temperature. We also provided health education, such wash hands, where to get COVID-19 testing, etc. to patients."

Question 2: ACORN students expressed consensus that the biggest challenge in their nursing education during the pandemic was “Our clinical hours transferred virtually; no interaction with patients.” They expressed agreement that “Our clinical preceptors and professors do a good job of providing resources that help us to continue developing our decision-making and critical thinking skills.” A major learning challenge reported is the newness of COVID-19 disease process, manifestation of symptoms, and the continuing development of effective treatments- “We all lack training to deal with this pandemic.” Main barriers, to practice in primary care during the pandemic, conveyed by students included: (1) lack of interaction with patients, (2) inadequacy of support services and care for underserved communities, and (3) language barriers for some Hispanic communities leading to insufficient education, training, and inconsistent access to telehealth services.

Question 3: Lastly, ACORN students communicated their thoughts about the COVID-19 pandemic’s impact on primary care. Their perspectives relevant to primary care: (1) may transfer to telehealth in the future; (2) has limited capacity to test for COVID-19; (3) has been extended to telehealth in practice, but many patients do not use or have access to virtual services; (4) there is lack of consistent and timely communication of protocols and public health measures in primary care during this pandemic, and (5) seeing an increase in patients postponing regular appointments as a result of fear of contracting COVID-19. They stressed their commitment to safe patient care and their education today and beyond this pandemic.

The five alumni’s interviews included open-ended questions regarding nursing practice as new RNs. For example, two of the interview questions were:

Please talk about situations you experienced in primary care during the COVID-19 pandemic.
What are the challenges you are facing during this pandemic?

Question 1: New RN ACORN alumni are currently practicing veterans’ health in different primary care VA outpatient clinics as patient care coordinators with one reporting that she is currently working in a VA COVID care unit during this pandemic. As patient care coordinators, alumni were adapting to addressing veterans’ health using technology instead of face-to-face interactions. They are using telehealth and the VA Video Connect services. They reported:

We basically facilitate any requests, any issues that veterans might have. If they need to be referred to mental health or if they have a question about medications, we address it first. If we’re not able to address it or fix whatever problem or question they have, we refer them to either the provider, a dietician, or whomever they need. Additionally, they commented that they not only conduct COVID-19 screening, but also monitor veterans’ health related to chronic diseases, such as, hypertension and diabetes-taking holistic approach to veterans’ health and health outcomes.

One alumna began as a patient care coordinator but was transferred to direct patient care on a COVID-19 care unit-for her- “it was so scary at the beginning.” Progressing forward, she reported that she cared for more and more patients diagnosed with COVID-19, learning to be more autonomous, flexible, and practicing safely using transformative and updated VA policies and procedures. She relied on evidence-based data, strategies, and resources. She concluded that the COVID-19 pandemic benefitted her career and life, positively impacting her learning and growth.

Question 2: New RN ACORN alumni stated that a big challenge during the pandemic was having the protocol in place for this novel coronavirus. One stated: “Every day is kind of fluid. We’re adapting.” Another commented: “When the cases were really high, there were a lot of changes as what to tell patients and quarantining.” They reported that the changing protocol, as well as, an aging population of veterans presented challenges to patient education and referrals. For example, several veterans, 75 years of age and above, reported difficulty in accessing a computer, iPad, or phone; thus, virtual contact for patient follow-up and education was challenging. Alumni said that they confronted and managed these challenges by learning quickly to meet the needs of veterans.

The ACORN team analyzed the ACORN students’ and alumni’s interview data. The team used qualitative data analysis to: (1) categorize the data, and (2) identify themes gleaned from the participants’ responses.

Findings

Two central themes that emerged from the six ACORN students’ and five alumni’s focus group and individual interview data were commitment to: (1) patients and safe, patient care, and (2) professional growth. These themes focused on commitment and are congruent with the American Nurses Association (ANA) Code of Ethics for Nurses [11], particularly:

Provision 2: The nurse’s primary commitment is to the patient, whether an individual, family, group, community, or population.

Provision 3. The nurse promotes, advocates for, and protects the rights, health, and safety of the patient.

Provision 5. The nurse owes the same duties to self as to others, including the responsibility to promote health and safety, preserve wholeness of character and integrity, maintain competence, and continue personal and professional growth.

ACORN students and alumni embodied the provisions of the ANA Code of Ethics for Nurses. Despite feelings of anxiety and uncertainty, students and alumni related corresponding expressions of wanting “To help patients” and “to keep learning” and practicing safely. They used their increased knowledge and skills to “combat fear of this pandemic and keep supporting my patients, family, and friends.” The students and alumni’s responses are emblematic of their commitment to uphold their mission to make lives better for patients, families, and communities. They unreservedly overcame any anxiety and uncertainty being experienced during the COVID-19 pandemic and verbalized that they never questioned their career choice. “We want to help people, and we want to keep learning. If this pandemic happens again, we’ll be better prepared in the future.”

Evaluation from the VA

At the five-month mark, a short survey to assess current comfort level in the Care Manager’s role was completed by all RN graduates and their preceptors. All RN graduates have completed two of the three PACT University series, and all report having increased knowledge of the roles and responsibilities of the PACT team members, role of the Ambulatory Care nurse, are comfortable or very comfortable with conducting telephone triage and working with an interdisciplinary care team. Preceptors also reported that the new graduates showed increased knowledge of the roles and responsibilities of the PACT model, Care Coordinator, and the Ambulatory Care nurse and each felt comfortable with the new graduates’ ability to conduct telephone triage using available resources. All nurse preceptors identified a need to the development of physical assessment skills but attributed the knowledge deficit to lack of experience in secondary and tertiary care settings. One preceptor shared that her preceptee was an asset to the PACT team and often provided a fresh perspective that assists in day-to-day problem-solving. In short, all new graduate nurses are performing well and as expected as novice nurses.

Implications

The substantial changes in health care caused by the COVID-19 pandemic suggest that barriers at the VA have been addressed by establishing community partnerships and instituting policy and procedural changes. While some facilitated changes may be short-lived, important shifts in attitudes and behaviors are needed by all health care personnel to support an organizational transformation and innovative strategies to improve care coordination at the VA, such as the ACORN project. Adequate nursing training programs and supportive organizational policies and procedures are important components of this changing paradigm. Furthermore, the ACORN project has been successfully implemented at the VA for two years. The number of nursing students in this project has steadily increased each year of the HRSA grant. The ACORN students have benefitted from the training resources that are an integral part of the VA’s internal programming and the nursing curriculum intrinsic to the grant mechanism.

The overarching theme of commitment in the ACORN project reflects (1) patients and safe, patient care and (2) professional growth. These findings highlight factors that could serve as targets for future research and interventions. For example, because of the VA’s capacity to offer specialized health services, veterans engaged in therapies and treatments using a telehealth platform, allowing providers to treat veterans remotely on their mobile devices or personal computers while minimizing face-to-face contact.

Future research could explore in greater detail barriers to using telehealth medicine in rural practice settings, and additional resources could be implemented to address discrepancies [12]. Moreover, future interventions and research could also target clinical issues in nonrural primary practice settings. Recent findings confirm cardiovascular disease, hypertension, and diabetes are independent predictors of complications developed during the clinical course of the disease [13]. Increased understanding of the actual incidence, the mechanisms, and outcomes of disease manifestations in patients is critical, particularly for those living with chronic illness and COVID-19. The partnership between the VA and ACORN offers an efficient way to promptly facilitate management decisions for veterans with COVID-19 and employment opportunities for new nurse graduates.

Conclusions

Efforts to meet the health care needs of new and established VA patients have required unprecedented measures by the government, institutions including nursing schools, and other public and private companies. The COVID-19 pandemic has disrupted our health care systems through its unexpected emergence, burdensome mutation perils, and distressing consequences. A full understanding of its clinical course in patients would allow frontline staff, including new nurses, and the executive leadership to proactively align care resources, optimize care decisions, and assist with strategies to manage the COVID-19 pandemic safely. Since the VA is an example of an integrated federal health system, which had already been implementing and developing internal programs and community partnerships prior to COVID-19, its system can serve as an exemplar for how to shift toward utilizing newly graduated baccalaureate nursing students to meet patient needs while also lessening transmission risk among patients and staff - in essence, a new paradigm would avoid the likelihood of the VA’s health care infrastructure becoming overwhelmed by the pandemic.

The ACORN project contributes to this paradigm by being designed to teach and train nursing students who were interested in community-based primary care nursing to enhance existing care strategies. It is evident that the hallmark measures of the ACORN project made a positive impact on veterans' health care and health outcomes, as well as for VA nursing care services and personnel. Then projects, like ACORN, could be sustainable and delivered to veterans during and after the COVID-19 pandemic.

Conflicts of Interest and Source of Funding

No conflicts of interest were declared by authors.

“This project is/was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number UK1HP3174 and title ACORN under the Nurse, Education, Practice, Quality and Retention Registered Nurses in Primary Care. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS, or the U.S. Government.”

References

1. Vespa J (2020) Those who served: America's veterans from World War II to the War on Terror. United States Census Bureau.
2. U. S. Department of Veterans Affairs (2020) Patient aligned care team university.
3. American Association of Colleges of Nursing (2020) Baccalaureate education.
4. Liu Y, Sayam S, Shao X, et al. (2017) Prevalence of and trends in diabetes among veterans, United States, 2005–2014. *Preventing Chronic Disease* 14: 170230.
5. Frank JW, Carey C, Nolan C, et al. (2018) Increased nonopoid chronic pain treatment in the Veterans Health Administration, 2010-2016. *Pain Medicine* 20: 869-877.
6. U. S. Department of Veterans Affairs (2019) Patient care services.
7. U. S. Department of Veterans Affairs (2020) Veterans health administration.
8. American Academy of Ambulatory Care Nursing (2019) Care Coordination and Transition Management (CCTM) Core Curriculum (2nd Edition).
9. U. S. Department of Veterans Affairs (2020) Veterans VA video connect.
10. HealthIT.gov (2019) What is telehealth? How is telehealth different from telemedicine?
11. American Nurses Association (2015) Code of ethics for nurses with interpretive statements.
12. Pierce BS, Perrin PB, Tyler CM, et al. (2020) The COVID-19 telepsychology revolution: A national study of pandemic-based changes in US mental health care delivery. *American Psychologist*. Advance online publication.
13. Sabatino J, De Rosa S, Di Salvo G, et al. (2020) Impact of cardiovascular risk profile on COVID-19 outcome. A meta-analysis. *PloS one* 15: e0237131.