

Second National Doctors of Nursing Practice Conference: Defining Ourselves Barriers to NP Practice in Rural Areas

Theresa M. Sander, MSN, FNP-C

Women's Health Care Associates,
Williamsport, Pennsylvania
Doctoral Student,
Robert Morris University

Consultants

Judith Kaufmann, Dr.PH, CRNP
Carl Ross, PhD, CRNP
MaryAnn Notarianni, DNSc, FNP
Gene Sprechini, PhD, Statistician
Linda L. Lindeke, PhD, RN,CRNP



Barriers to NP Practice in Rural Areas

Learning Objectives:

- Understand the barriers to NP practice and how these barriers impact practice
- Explore methods to improve access to care in rural areas
- Describe how a practice model may be one answer to change negative barriers into positive outcomes, improving practice

Aims of Project:

- Identify the significant Barriers to NP practice in rural Northeastern Pennsylvania
- Explore ways to increase access to rural underserved disparate populations
- Describe how these barriers impact practice



Background & Significance

- NP's are experts at primary /secondary prevention (Johnson,2001)
- NP's are educated to address "Healthy People 2010"
 - Chronic illness, mental health
 - Disease prevention
 - Access to care issue (US Department of Health & Human Services,2005)
- NP's are principal providers in rural health (Martin,2000)
- Greater satisfaction with NP interaction & care than MD's in adult & pediatric settings (Douglas,2004)
- NP's provide more
 - Holistic care;
 - Education;
 - Leading to greater levels of patient satisfaction than MD's. (Seale,2005)

Background & Significance

- Quality of rural health care compares unfavorably with the rest of the nation (Rickettes,2000)
- Rural health care system has changed dramatically
 - “The public health infrastructure in rural America is not well understood, but is potentially the most fragile aspect of the rural health care continuum.”
 - “ The context of rural health care can be viewed as a harbinger of the national health care system, where pressures for efficiency & cost control are expected to function with fewer resources, & the concern for outcomes places the systems in an ethical & financial bind.”

(Rickettes, 2000)

Background & Significance

- Rural areas have limited health care access
- 10% of rural households live at poverty level
(Pa. Rural Health Care, 2007)
- Lack of access to acute care results in:
 - Delayed Treatment
 - Sicker patients
 - Chronic illnesses
 - Increased morbidity and mortality
(Hartley, 2004)
- Injuries are usually serious requiring ED care, or hospitalization: Fatalities are 12% higher
(Pa. Rural Health Care, 2007)

Review of the Literature

- Three barriers identified by Lindeke in 2001 are:
 - Lack of understanding by the public about NP role
 - Physicians lack of knowledge about NP role
 - Lack of peer support and professional isolation
(Lindeke, et. al.,2001)

Review of the Literature

- In 2004 Lindeke utilized a 28 question survey to identify barriers to practice experienced by NP's
- 4 qualitative categories of data emerged:
 - Launching a practice or career
 - Building a practice or career
 - Navigating through regulatory or reimbursement issues
 - Thriving as an NP
- These four categories were then developed into ten themes

Review of the Literature

Categories

1. Launching a practice

2. Building a practice

3. Navigating through regulatory or reimbursement issues

4. Thriving as an NP administrators'

practice

Themes

1. Difficulty finding right position
2. Lack of preparation to practice

1. Limitations of clinic space & resources
2. Salary & benefits concerns
3. Lack of peer network
4. Lack of workplace support

1. Complex legal & regulatory
2. Confusing reimbursement issues

1. Health care professionals' & lack of understanding of NP practice
2. Public's lack of understanding of NP

Review of the Literature

- In 2005 Lindeke, Jukkala, & Tanner, replicated the 2001 study in Minnesota & found:
 - Persistent barriers remained unchanged
 - New issues evolved:
 - Low salaries
 - Lack of designated examination rooms stocked with NP practice items
 - Lack of office and conference space

Review of the Literature

- Gould(2007)described NP experiences
 - NP's Practice Utilizing a holistic approach
 - A pioneering spirit
 - Pride and excitement in their work
 - Perceived lack of acceptance
 - Inter-professional relationships
 - System issues
 - Reimbursement
 - Referral
 - Prescription limitations

Review of the Literature

- Bailey(2005) studied collaboration among MD's & NP's and found
 - Scope of practice issues that emphasize role clarity & trust
 - Differences in perceptions of disease prevention and health promotion
 - Understanding that collaborative relationships continually evolve

Review of the Literature

- Wilson, Person, & Hassey, (2002), explored barriers to NP role among British GP's: Four themes evolved;
 - Threats to GP status (job & financial security)
 - Inefficient nursing capabilities
 - Training & scope of responsibility
 - Structural & organizational Issues
- Hallas (2004), studied attitudes for effective pediatric NP & physician collaboration with barriers similar to Lindeke, et.al., 2001
- Main (2007) explored HCP's perception of the NP role & indicating it challenges professional boundaries & takes on the autonomy of the medical model

Project Design and Methods

- Mixed Method descriptive study
- Comparison of present 2008 data to Lindeke's 2001 study
- Convenience Sample of 101 NP's who returned surveys from two NP organizations in Northeastern PA
- NP's were mailed
 - Cover letter
 - IRB information from Robert Morris University,
 - Survey
 - Formal consent to participate
- NP's had an opportunity to ask questions concerning the study

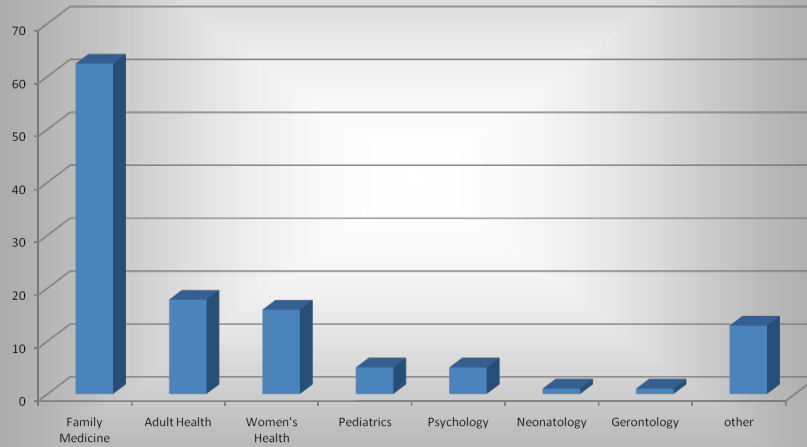
Project Design and Methods

- Permission obtained from IRB at RMU in May, 2008
- Permission to use tool obtained from Lindeke in 2007
- The reliability & validity of the tool was established by pretesting with content experts from the Washington consulting group in 1994
- Dr. Lindeke, completed a pilot study in 2001 & published research using tool three times.
- Researcher has access to nursing leaders, who utilized focus groups to validate & pilot test the tool
- Tool was distributed, collected, & secured by researcher

Instrument

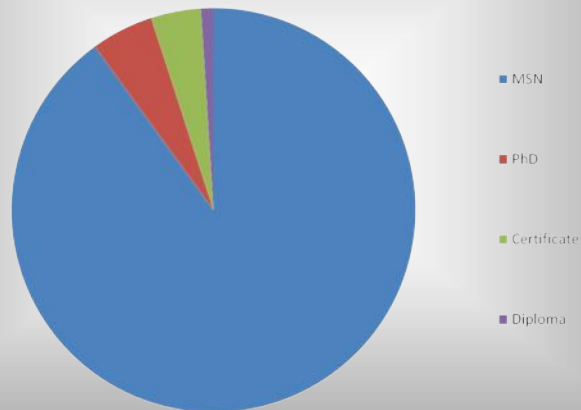
- Survey Includes:
 - 8 Demographic questions
 - 28 Questions describing potential barriers to practice
 - 1 open ended question:
 - “What barriers do you see impacting your practice and how do these barriers impact your practice?”
 - 1 Question requesting the participant to rate how restrictive the practice is using a code from 1 representing non- restrictive, to 5 representing restrictive

Demographics of Sample



Distribution of Education

Nursing Credentials of Participants



Statistical Analysis

- Quantitative Data
- Descriptive analysis: means, SD, & frequencies
 - Rank order barriers using frequency table
 - Use Chi –Squared goodness –of-fit test to determine statistically significant differences in percentages between both studies.(2001 & 2008)
- Likert scale used to rank each barrier from 1-5
- Mean ranking for 13 significant barriers was calculated to measure how significant the respondents thought the barriers were.
- Range is between 2.76 & 3.19

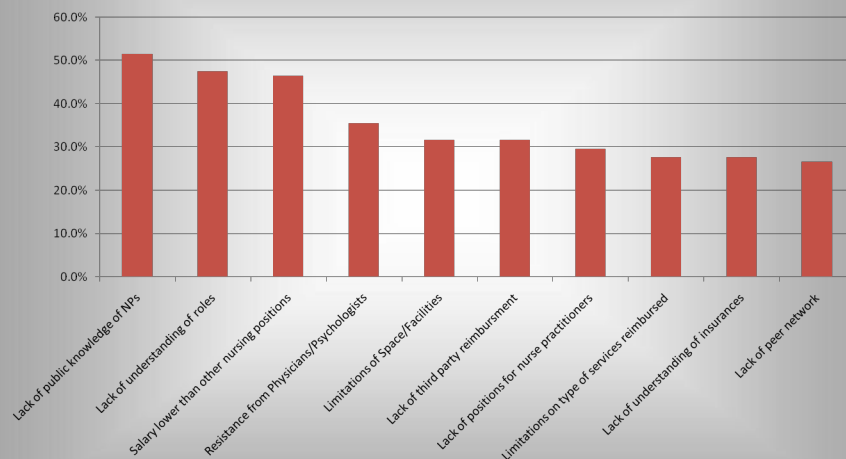
Mean Ranking for 13 Barriers

2008 Barriers	Mean Ranking	SD	Number
Lack of third party reimbursement	3.34	.795	32
Limitations of the types of services reimbursed	3.21	.682	28
Lack of understanding of the insurance system	3.19	.833	27
Lack of understanding of AP roles by HCP's	3.18	.769	47
Lack of public knowledge about NPs	3.10	.768	51
Lower salary than other nursing positions	3.09	.856	46
Expected to assume other nursing functions	2.96	.840	23
Limitations of space and facilities	2.94	.656	32
Lack of peer network	2.94	.886	27
Lack of positions for NPs	2.93	.934	28
Resistance from Physicians and Psychologists	2.91	.776	35
Lack of assistive and supportive staff	2.84	.647	23
Lack of other administrative support	2.76	.822	24

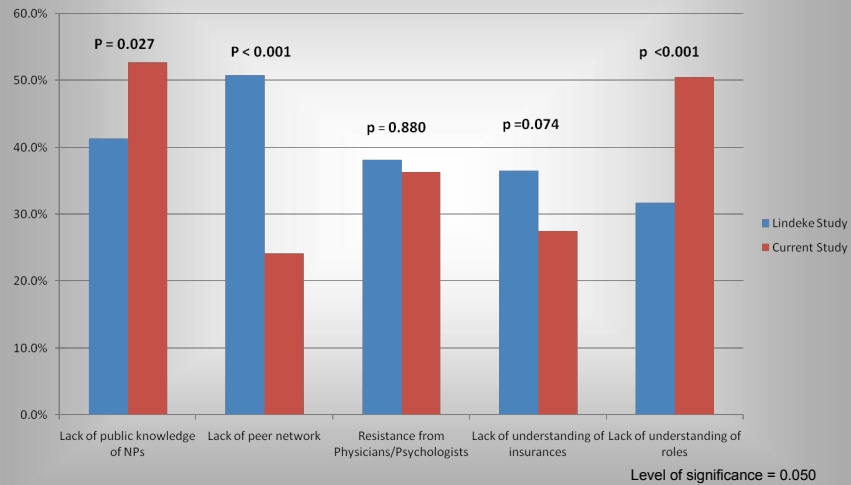
Comparison of the Most Frequently Perceived Barriers

2008 Study	N %	2001 Study	N %
Lack of knowledge of NP practice	48 (52.7%)	Lack of peer network	32 (50.8%)
Lack of understanding of NP role	46 (50.5%)	Lack of public knowledge of NP	26 (41.3%)
Inadequate salary	38 (41.8%)	Resistance from Physicians	24(38.1%)
Resistance from physicians	33(36.3%)	Lack of understanding of insurance's	23 (36.5%)
Space limitations	27(29.7%)	Lack of understanding of NP's by other HCP's	20(31.7%)

Top Ten Barriers of Current Study



Statistically Significant Differences Between 2008 and 2001 Studies



Results of research

- Chi-squared goodness-of-fit tests used to determine statistically significant differences between studies for each of top five barriers
- Level of significance set at 0.05
- Statistically significant differences found in:
 - Lack of peer network (p<0.001)
 - Lack of public knowledge (p = 0.027)
 - Lack of understanding of advanced practice roles (p<0.001)

Content Analysis & Qualitative Data

- Collected from one open ended question: For each barrier you experience from the checklist, describe how it affects your practice
- Responses transcribed verbatim
- Content analysis by two researchers using categorical & thematic coding
- Four categories of data emerged & were ranked in order of importance

Categories & Codes Emerging From Perceived Barriers

Categories of Data	Themes Related to Barriers
Lack of role recognition & acceptance	<ol style="list-style-type: none"> 1. Knowledge & scope of practice 2. Low salary 3. NP's as "invisible providers" 4. Hostility toward NP's
Professional role issues	<ol style="list-style-type: none"> 1. Role confusion; HCP's & clients 2. Role expectations 3. Confusion related to other HCP's, PA's 4. Collaborating Vs Supervising MD's
System Problems	<ol style="list-style-type: none"> 5. Regulatory & Reimbursement issues 1. Insurances (HMO's not accepting NP's) 2. Lack of support staff 3. Resistance of Nursing Administration 4. Lack of Information Technology
Professional Preparation	<ol style="list-style-type: none"> 5. Space & Equipment issues 1. Lack of Insurance Knowledge 2. Lack of billing information 3. Lack of specific training & education

Results of Research

- Most frequently selected barriers 2008
 1. Lack of public knowledge of NP's
 2. Lack of understanding of NP role
 3. Lower salary than other Nursing positions
 4. Resistance from Physicians
 5. Space Limitations

Comparison of Qualitative & Quantitative Barriers Concur With Each Other

Qualitative Barriers	Quantitative Barriers
Lack of knowledge of NP practice	Lack of role recognition & acceptance of NP practice
Role confusion	Lack of understanding of NP roles
Reimbursement Issues	Lower salary than other health care professionals
System Problems Regulatory & Reimbursement, Space, equipment	System problems Regulatory & Reimbursement issues, equipment

Limitations of Study

Self –report data & Survey : Increases bias due to socially desirable responses & recall bias

Possible sampling bias secondary to using a non-randomized convenience sample(Yoon & Horne,2004)

Likert scale result in a “floor or ceiling effect” limiting variability in opinions (Passmore,et.al,2002)

NP’s rural practice verification & demographics are self-reported & not verifiable

Study describes practice barriers in one state, and may or may not be generalized

Limitations of Study



Sander,2009

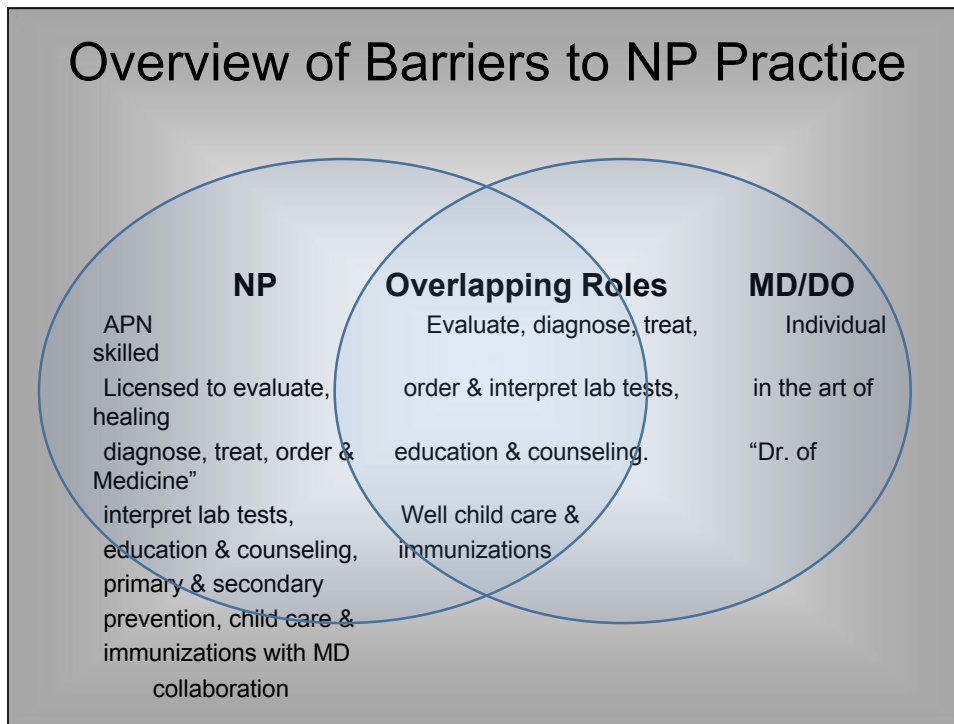
Discussion

- There is a persistence of same barriers to practice in past ten years, despite multiple improvements;
 - Prescribing controlled substances
 - Permitting NP's to be listed as Primary Care Providers
 - Allowing NP's to bill independently
- The exceptionally high response rate to survey (101/150), & well articulated comments demonstrate NP's desire to improve practice

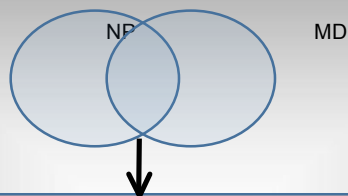
Comments From Study Participants

- Lack of public knowledge of NPs
 - “I encounter patients who want to know when I'll be done practicing as a nurse, or when I'll finally be a doctor”
- Lack of understanding of NP role
 - “When I am called a Physicians' Assistant, I correct the physician. The response is, “same thing”
- Lower salary than nursing positions
 - “It is discouraging to practice as an NP making the same amount as RN's”
- Resistance from physicians other health care providers
 - “We still experience physicians in primary care who don't want an NP to see their patients”
- Space and Equipment Limitations
 - “NP's get the smallest rooms. This is difficult with GYN exams”

Overview of Barriers to NP Practice

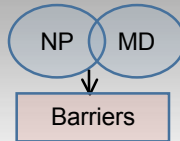


Overview of Barriers to NP Practice



Public lack of knowledge regarding NP role
MD lack of knowledge & poor attitude about NP role
Lack of peer support and professional isolation
Lack of respect for NP practice
Public and family reluctance to NP care
Low salaries and limited office space

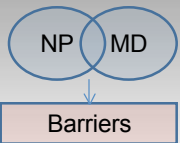
Overview of Barriers to NP Practice



Strategies to improve practice

- NP's must be educated about public policy & barriers to practice in MSN programs, & require ongoing mentorship
- Educate NP students to join local & national organizations & volunteer time & talent to move barriers in positive directions
- Attending public hearings, meeting state representatives, writing letters to congress and the President detailing how NP's can fill the "gap" in health care

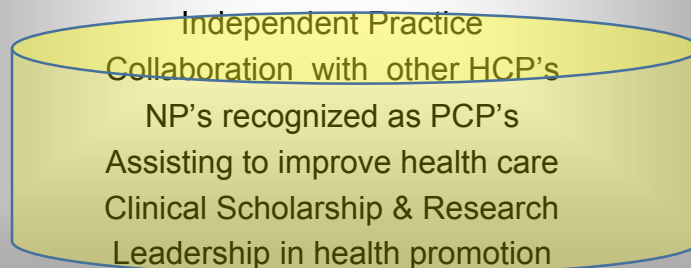
Overview of Barriers to NP Practice



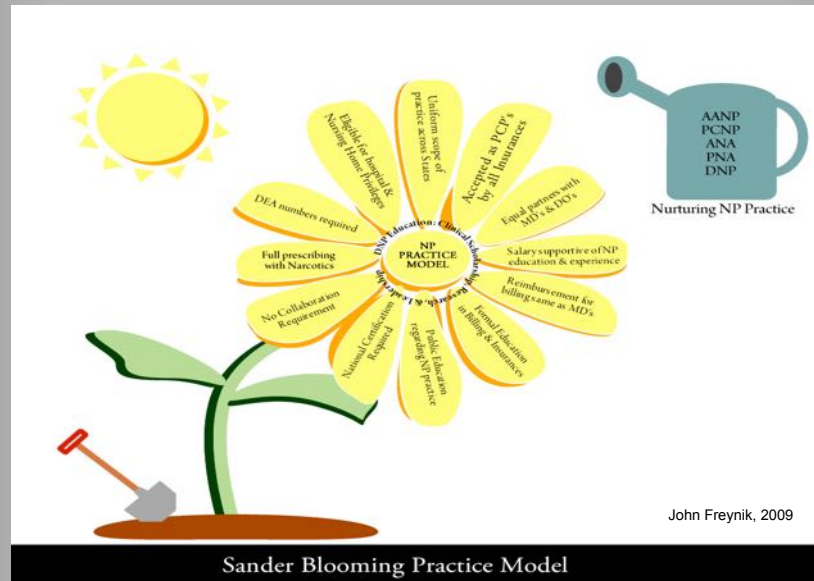
Strategies



Measurable Outcomes



A Potential Practice Model



Reducing Practice Barriers

- NP's receive DNP Degrees
- Conduct evidence based research
- Become actively involved in health care arena
- Educate the public & HCP's about NP role
- Collaborate with other providers to improve access to disparate underserved areas
- Moving toward the DNP degree, receiving education in research methodology, & working with PhD researchers

Future Research

- Surveying public & physicians knowledge of NP practice
- Studying NP's ability to practice independently
- Studying NP's ability to improve health policy
- Researching patients acceptance of NP practice
- Standardizing the educational preparation for practice



Who Is Affected by Practice Barriers?

Our communities

Our Nation

Our patients

NP's themselves by

Decreasing morale

Decreasing self-esteem

Decreasing economic equity

Retention in profession



References

- Bailey,P., Jones,L.,& Way,D.,(2005). Family Physician/ Nurse Practitioner; Stories of collaboration. *Journal of Advanced Nursing*, 53(4), 381-391.
- Bryant-Lukosius,D., Di Censo,A., Browne, G., & Pinelli,J.,(2004) Advanced practice nursing roles Development, Implementation, & Evaluation. *Journal of Advanced Nursing*, 48(5), 519-529
- Center for Rural Pennsylvania., (2007). *Rural by the numbers*. Retrieved January 15, 2008, from: <http://www.dsf.health.state.pa.us/health/Lib>

References

- Clarion, O.,(2007). Strategies to Overcome Barriers to Effective Nurse Practitioner and Physician Collaboration. *The Journal for Nurse Practitioners*, 3(8), 538-548.
- Gould, O., Johnstone, D.,& Wasyliw, L.,(2007). Nurse practitioners in Canada: Beginnings, benefits, & barriers. *Journal of the American Academy of Nurse Practitioners*,19(4),165-171.
- Hallas,D., Butz,A.,& Gitterman,B.,(2004). Attitudes and beliefs for effective pediatric and physician collaboration. *Journal of Pediatric Health Care*,18(2), 77-86.

References

- Hartly,D.,(2004).Rural health disparities, population health, and rural culture. *American Journal of Public Health*, 94(10), 1675-1678.
- Johnson, M.,(2001). Meeting health care needs of vulnerable populations; Perceived barriers. *Journal of Community Health Nursing*, 18(1), 35-52.
- Lindeke, L., Bly, T., & Wilcox,M.,(2001), Perceived barriers to rural nurse practitioner practice. *Clinical Excellence for Nurse Practitioners*, 5(4), 218-221.

References

- Lindeke,L., Grabau,A.,& Jukkala,A.,(2004). Rural NP perceptions of barriers to practice. *The Nurse Practitioner*, 29(8),50-1.
- Lindeke,L., Jukkala,A.,& Tanner,M., (2005). Perceived barriers to nurse practitioner practice in rural settings. *Journal of Rural Health*, 21(2), 178-181.
- Main,R.,Dunn,N.,&Kendall,K.,(2007).“Crossing professional boundaries:”Barriers to the integration of NP’s in primary care.” *Education for Primary Care*,3(18),480-487.

References

- Martin, K., (2000). Nurse Practitioners; A comparison of rural – urban practice patterns and willingness to serve in rural areas. *Journal of American Academy of Nurse Practitioners*, 12(12), 491-496.
- Norwood, S., (2000). *Research Strategies for Advanced Practice Nurses*, (pp. 254-255), New Jersey, Prentice-Hall
- Passmore, C., Alison, D., Parchman, M., & Tysinger, J., (2002). Guidelines for constructing a survey, *Family Medicine*, 34(4), 281-286.
- Pennsylvania Rural Health Association, (2005). Pennsylvania Rural Health Care; Status 1V. Retrieved January 15, 2008, from <http://www.dsf.health.state.pa.us/health/Lib>

References

- Polit, D., & Beck, C., (2006), Analyzing Qualitative Data, (pp. 368- 369), *Essentials of Nursing Research*, Philadelphia, Lippincott, Williams & Wilkins.
- Rickettes, T., (2000), The changing nature of rural health care. *Annual Review of Public Health*, 21(2), 639-57.
- Roblin, D., Becker, E., Adams, E., Howard, D., & Roberts M., (2004). Patient satisfaction with primary care: Does type of practitioner matter? *Medical Care*, 42(6), 579- 590.
- U.S. Department of Health & Human Services (2007). *Highlights of the Healthy People 2010*, Retrieved January 18, 2008, from <http://www.healthy people.gov/about>

References

- Washington Consulting Group. (1994), *Survey of certified nurse practitioners & clinical nurse specialists*: December 1992. Rockville, Maryland: Division of Nursing, health Resources services administration.
- Wilson, A., Person, D., & Hassey, A., (2002). Barriers to developing the nurse practitioner role in primary care: The GP perspective. *Family Practice*, 19(6), 641-646.
- Yoon, S., Horne, C., (2004). Accruing the sample size in survey research. *Southern Online Journal of Nursing Research*, 2(5), 1-17.