

Tobacco Use of BSN Nursing Students in Arkansas: Global Health Professional Students Survey

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Faculty Disclosure

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Conflicts of Interest	None
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Session Goal

Examine findings of the Global Health Professions Student Survey of 3rd year BSN nursing students in Arkansas.

Session Objectives

- Explore the feasibility of the Global Health Professional Students Survey in Arkansas.
- Gain a comprehensive view of nursing students' tobacco use.
- Determine evidence-based action plan to address tobacco use during nursing school.

Arkansas

United States



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- Rural
- Medically Underserved
- Impoverished
- Undereducated

Prevalence of Smoking

Global

21%

U.S.

18.1%

Arkansas

27%

WHO, 2016; U.S. Surgeon General's Report, 2014

Smoking among Nurses and Nursing Students

	<u>Global</u>	<u>U.S.</u>	<u>Arkansas</u>
Nurses	15.9%	13%	Unknown
Nursing Students	≤5% - 46.6%	Unknown	Unknown

WHO, 2013; Sarna et al, 2014, Warren 2009

Global Health Professions Student Survey (GHPSS)

- Prevalence
- Behaviors/Cessation
- Secondhand Smoke
- Curriculum/Training
- Attitudes
- Demographics

Methods



GHPSS Methodology

- Sampling
- Core questionnaire (42)
- Timeline
 - In class data collection
 - Total data collection from all schools

Inclusion/Exclusion Criteria

- Inclusion:

All third-year BSN nursing students from public or private schools scheduled to graduate by Dec. 2014

- Exclusion:

- Nursing Licensure
- Cannot read or speak English

Design

- Descriptive
- Cross section
- Pilot

Procedures

- Informed consent script emphasizing confidentiality and anonymity
- Computer Scannable Answer sheets
- Face-to-face administration of 62 item survey based upon core survey
- 30-40 minutes during class
- Fieldwork conducted in 6–8 weeks

Results



Sample

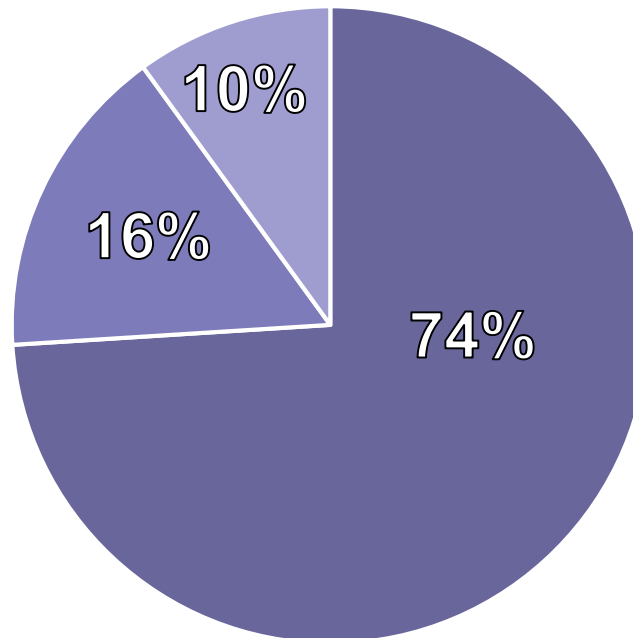
School Response Rate 8/11	Class Response Rate	Student Response Rate: 516/517
72.7%	100%	99.8%

Demographics (N = 516)

	<u>All</u>	<u>Tobacco Users</u>
Age		
19-29	85%	83%
> 29	15%	17%
Gender		
Male	17%	23%
Female	83%	77%
Race		
White	80%	81%
Other	20%	19%
Household income		
< \$10,000	22%	24%
\$10,000-\$49,999	47%	43%
≥ \$50,000	31%	31%

Prevalence of Tobacco Use in Sample

25.8% (133 / 516)



- Non-users
- Cigarettes and Dual Users
- Other Tobacco Products only

Exposure to Second Hand Smoke

In residence 22%

Elsewhere 54%

Attitudes: Nurses' Role

	<u>Non-users</u>	<u>Tobacco Users</u>
Nurses are role models	97%	94%
Receive cessation training	92%	89%
Deliver cessation advice	91%	98%
Advise patients to quit	91%	91%

Attitudes: Policies

	<u>Non-users</u>	<u>Tobacco Users</u>
Ban sales to adolescents	91%	93%
Ban tobacco advertising*	76%	63%
Ban Smoking:		
Restaurants*	98%	93%
Public enclosed spaces*	89%	71%
Bars*	73%	40%

*P < .05

Attitudes: Impact

Quit rates improve if a nurse advises quitting.*

Non-users

70%

Tobacco Users

57%

*P < .05

Behaviors: Advise to Quit

Are health professionals less likely to advise patients to stop smoking if they smoke?*

Non-users
83%

Tobacco Users
73%

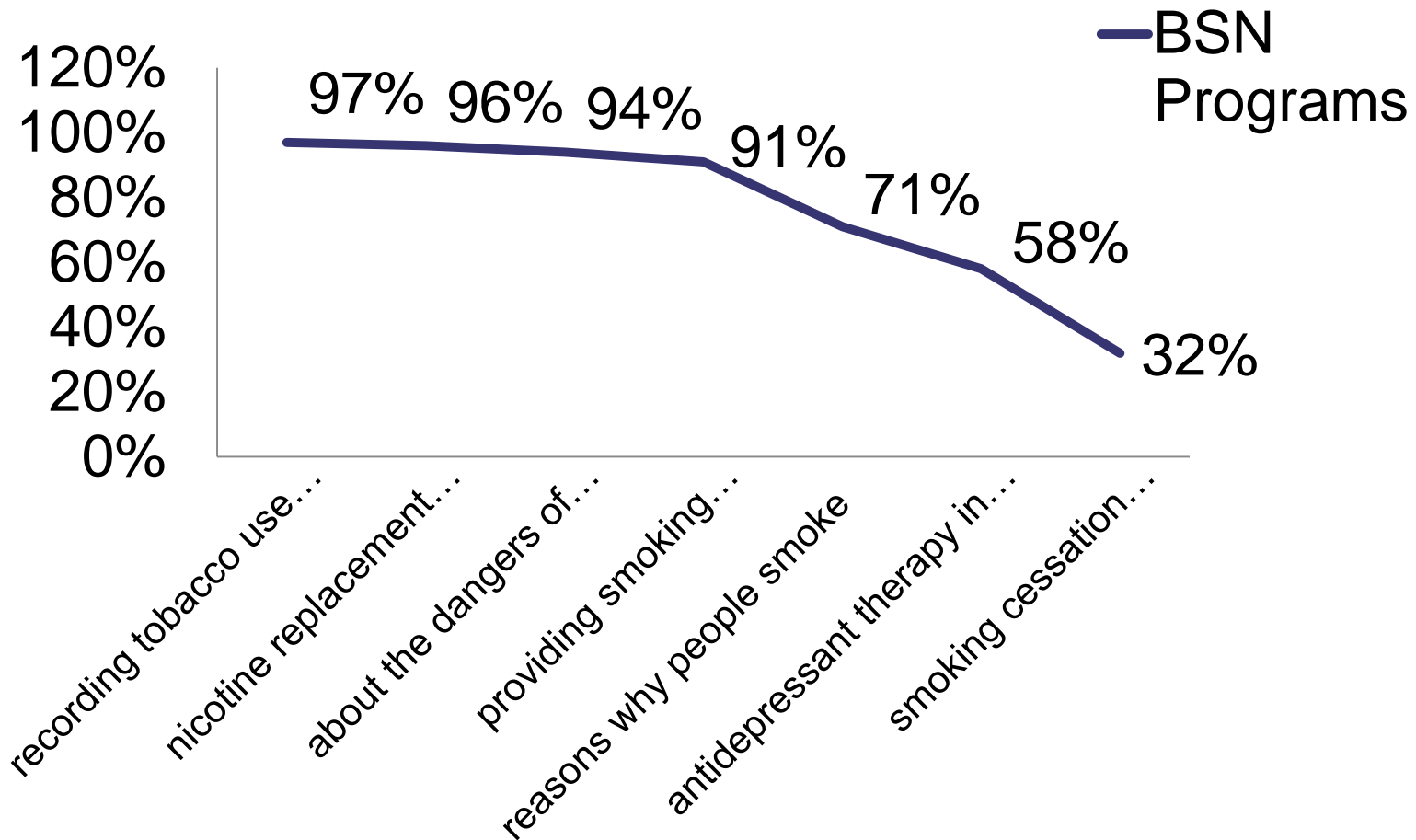
*P < .05

Behaviors: Cessation

Wanted to quit now	81%
Ever received help or advice	24%

Tobacco Control Topics Taught in Arkansas Nursing Schools

% of Students Responding YES



Limitations

- Lack of biochemical validation
- Non-participating schools in the northeast quadrant of state
- Survey is limited to 3rd year students

Conclusions

- The GHPSS was feasible.
- Results aligned with GHPSS findings worldwide
 - Exposure to SHS
 - Positive attitudes about nurses role
 - Users less likely to “Advise to Quit”
 - Impact of nurses to help others quit was low
 - Strong desires to quit without being offered help
 - Limited tobacco curriculum

MPOWER

Monitor use and prevention policies

Protect from secondhand smoke

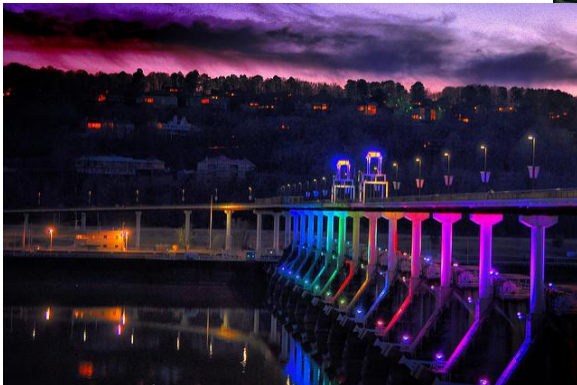
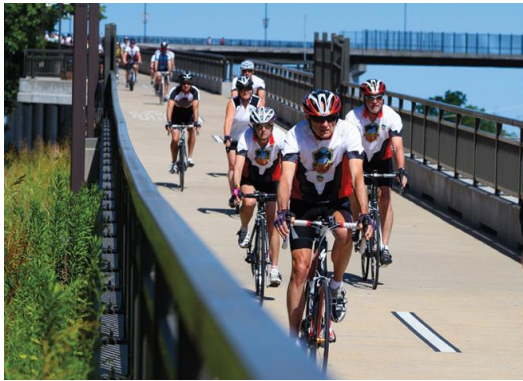
Offer to help quit

Warn about the dangers of tobacco use

Enforce bans

Raise taxes

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Significance of Tobacco Use by Nursing

Specialty

Specialty	Total n=504* (97.7%)		Nonusers n = 375 (72.8%)		Tobacco Users n = 128 (24.9%)						Totals	p	
	n	(%)	n	(%)	Cigarettes Only n=61 (12.1%)		Other Tobacco Products Only n=47 (9.3%)		Dual Users*** n=20 (4.0%)				n
Emergency	73	(15)	48	(65.8)	14	(19.2)	6	(8.2)	4	(5.5)	24	(34.2)	.022
Intensive Care	53	(11)	33	(62.3)	9	(17.0)	8	(15.1)	3	(5.7)	20	(37.7)	.268
Medical/Surgical/ Geriatrics	22	(4)	14	(63.6)	3	(13.6)	4	(18.2)	1	(4.5)	8	(36.4)	.289
Obstetrics	60	(12)	47	(78.3)	6	(10.0)	5	(8.3)	2	(3.3)	13	(21.7)	.903
Neonatology/ Pediatrics	123	(25)	106	(85.5)	8	(6.5)	8	(6.5)	2	(1.6)	18	(14.5)	.589
Mental Health	23	(5)	18	(78.3)	3	(13.0)	1	(4.3)	1	(4.3)	5	(21.7)	.333
Community	11	(2)	7	(63.6)	1	(9.1)	1	(9.1)	2	(18.2)	4	(36.4)	.012
Perioperative	43	(9)	31	(72.1)	5	(11.6)	6	(14.0)	1	(2.3)	12	(27.9)	.145
Oncology	16	(3)	12	(75.0)	1	(6.3)	1	(6.3)	2	(12.5)	4	(25.0)	.001
Undecided	78	(16)	59	(74.7)	11	(13.9)	7	(8.9)	2	(2.5)	20	(25.3)	.014

* 12 cases of missing data from total sample (n=516). Significance (Chi²) was set at $p < 0.05$. and is reported in red.

Tobacco Products Used and Desired Nursing Specialty

Specialty	Total n=504*(97.7%) n(%)	Tobacco Users n = 128 (24.9%) Tobacco Products Reported Being Used									Totals
		Cigarettes n (%)	Chew n (%)	Snuff n (%)	Snus n (%)	Bidis n (%)	Cigars n (%)	Kreteks n (%)	Pipes n (%)	Waterpipe/ Hookah n (%)	
Emergency	73(15)	19	1	2	0	0	7	0	1	0	30
Intensive Care	53(11)	12	1	2	0	0	3	0	1	7	26
Medical/Surgical/ Geriatrics	22(4)	4	0	1	0	0	3	0	0	1	9
Obstetrics	60(12)	8	0	0	0	0	4	0	0	5	17
Neonatology/ Pediatrics	123(25)	10	1	0	0	0	2	0	1	7	21
Mental Health	23(5)	4	2	0	0	0	0	0	0	0	6
Community	11(2)	3	1	0	0	0	2	0	1	1	8
Perioperative	43(9)	6	1	1	0	0	3	0	1	1	13
Oncology	16(3)	3	0	0	0	0	2	0	0	1	6
Undecided	78(16)	13	2	0	2	0	4	1	0	2	24
Total	504(100)	82	9	6	2	0	30	1*	5	25	160
p		.105	.188	.286	.289	*	.119	.8	.296	.06	

<i>Self Reported Tobacco Use by Gender</i>									
	Nonusers (n=383)		Tobacco Users (n= 132)				Total n=515**		
			Cigarettes Only	Other Tobacco Products Only	Dual Users***				
	n	(%)	n	(%)	n	(%)	n	(%)	Totals
Female	329	(76.51)	57	(13.26)	29	(6.74)	15	(3.49)	430
Male	54	(63.53)	6	(7.06)	20	(23.53)	5	(5.88)	85
Totals	383	(74.37)	63	(12.23)	49	(9.51)	20	(3.88)	515

**p*-Value<0.0005 for the difference between non-tobacco users and tobacco users in eight BSN programs.
Significant findings are bold; **The gender of one student was missing.516 students comprised total number of respondents. ***Dual User is defined as one who uses cigarettes + at least one other tobacco product in the past 30 days.

50th Anniversary of the United States Surgeon General's Report on the Dangers of Smoking

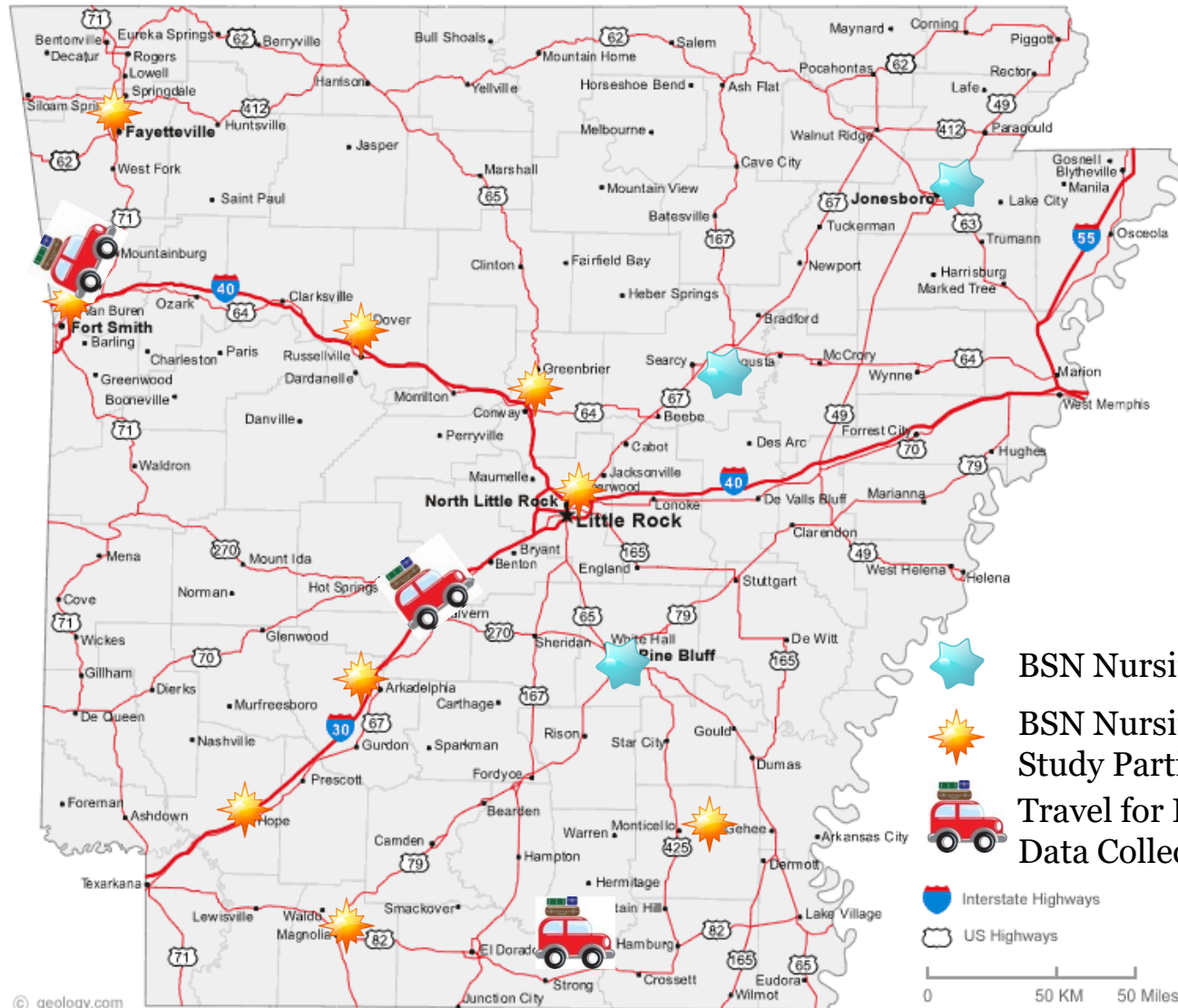
- Focus of most reports has been cigarette smoking
- Considerable scientific evidence linking the health risks with tobacco use
- Surgeon General is now urging the monitoring of all combustible tobacco products




U.S. Department of Health and Human Services (2014). *The Health Consequences of Smoking- 50 Years of Progress: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

Categories of Tobacco Use by Gender

	Cigarettes only n(%)	Other Tobacco Products only n(%)	Dual Users n(%)
Female	57 (90%)	29 (59%)	15 (75%)
Male	6 (10%)	20 (41%)	5 (25%)

BSN Nursing Programs in Arkansas



-  BSN Nursing Programs
-  BSN Nursing Program Study Participants
-  Travel for Face-to-Face Data Collection

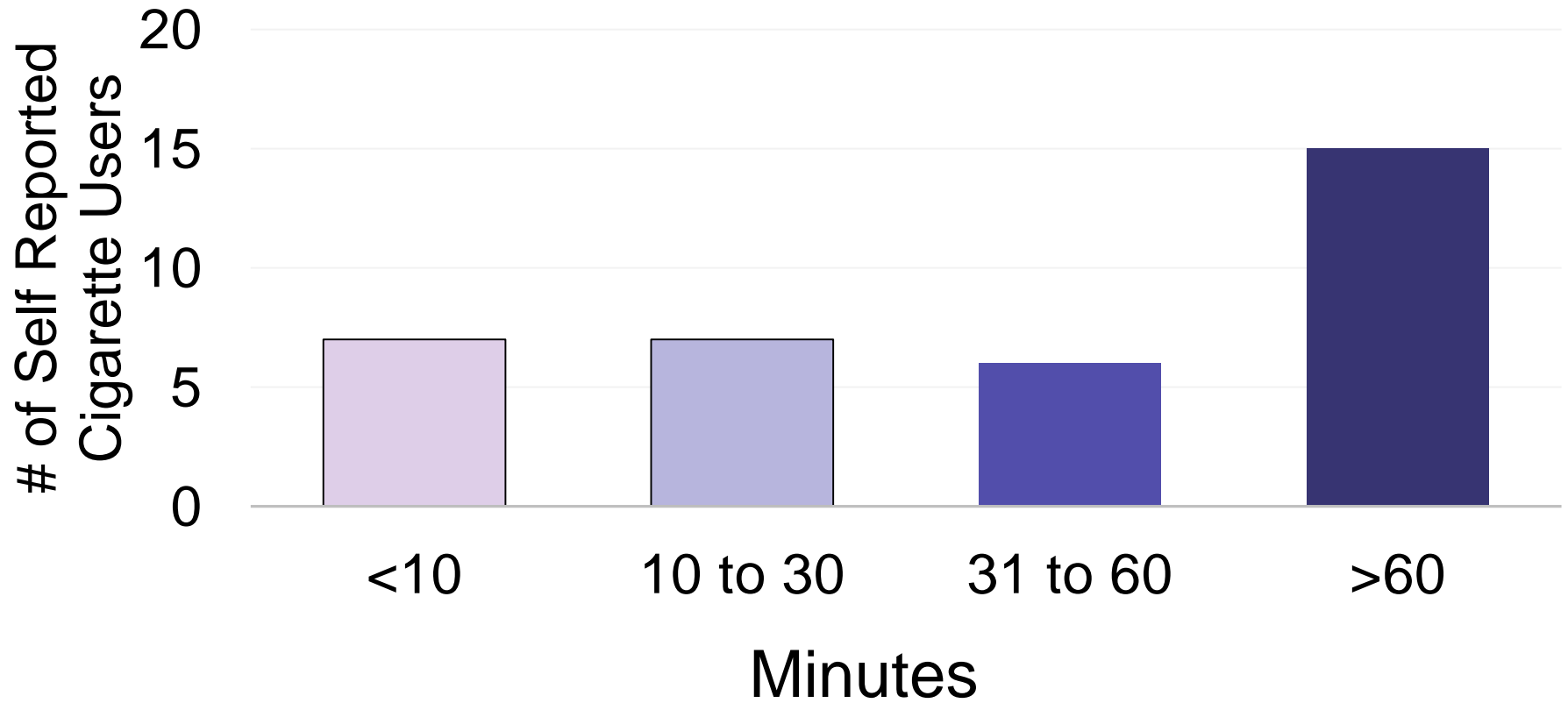
 Interstate Highways

 US Highways

Data Analysis

- STATA, SPSS (v 21.0), NCSS (v 8.0.13)
- Chi Square was used to test relationships. Significance was set at the .05 level.
 - Assumptions of Chi square were met

Time to First Cigarette



Tobacco Products Used by Arkansas Nursing Students Compared to Youth, College Students, General Population

<u>Survey</u>	<u>Cigarettes</u>	<u>Cigars</u>	<u>Water Pipe/Hookah</u>	<u>Smokeless Tobacco</u>
GHPSS 3 rd Year BSN Nursing Students in Arkansas	16.1%	5.8%	5.0%	3.4%
NYTS 10 th -12 th Grade	14%	12.6%	5.4%	6.4%
ACHA NCHA II College Students	14.3%	6.0%	7.6%	3.7%
NATS General Population	19.6%	6.6%	1.5%	4.4%

National Youth Tobacco Survey 2012(NYTS); The American College Health Association, National College Health Assessment II (ACHA NCHAII [Spring,2012]); King Dube, & Tynan (2012); *The National Adult Tobacco Survey 2009-2010(NATS)

Behaviors: Advise to Quit

Are health professionals less likely to advise patients to stop smoking if they use other tobacco products?

Non-users

81%

Tobacco Users

68%

*P < .05