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Tobacco use among blue collar workers in Nigeria: A survey of Construction Artisans in Ekiti state

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Tobacco use among blue collar workers in Nigeria: A survey of Construction Artisans in Ekiti state

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Presentation Outline

- Background
- Purpose
- Study Methodology
- Results
- Discussion
- Limitation
- Conclusion



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Background

- Nigeria is located in W/Africa.
- 36 states and FCT.
- Ekiti State- S/West Nigeria





Background

- The construction industry contributes to employment creation and economic growth.
- Construction artisans perform skilled work relating to the erection or assembly of large structures such as buildings, roads, and bridges with their hands.

Background

- Among African countries unskilled (blue-collar) workers had higher risk of smoking than professionals (white-collar) workers and unemployed people.
- Compared to all other occupational groups in the US, construction workers had the highest number of ever-smokers-48% compared to 39% for all other occupations combined.

Problem and study aim

- The prevalence of tobacco use among blue-collar workers is disproportionately higher than in the general population.
- Limited studies have been conducted among construction artisans in Nigeria
- The aim of this study is quantitatively determine the prevalence and identified the factors associated with smoking among construction artisans in Ekiti State, Nigeria.





Methods

- The study was carried out in Ekiti State.
- The population consisted of construction artisans, journeymen and their apprentices who were carpenters and bricklayers.
- A cross-sectional design



Methods

- **Exposure Variable:**
age, gender, marital status, religion and level of education.
- **Dependent variable:**
Ever use tobacco (yes/no)
- A chi-square test to determine association between dependent and independent variables
- Multivariate logistics regression to determine the factors associated with smoking.



Results

- Table 1: Socio-demographic factors associated with ever smokers among respondent construction artisans

Variable	Ever use TBC- Y n(%)	Ever use TBC-N n(%)	Chi-square	Df	P-square
Age group (in years)					
≤ 20	13 (17.1)	63 (82.9)	18.903	3	<0.001
21 – 30	7 (10.8)	58 (89.2)			
31 – 40	19 (41.3)	27 (58.7)			
> 40	5 (12.2)	36 (87.8)			
Yes of exp (yrs)					
< 1	4 (6.7)	56 (93.3)	9.823	4	0.044
1-5	6 (17.6)	28 (82.4)			
6-10	8 (22.2)	28 (77.8)			
11-20	5 (23.8)	16 (76.2)			
>20	21 (27.3)	56 (72.7)			

Results

- **Table 2: Adjusted Odd Ratios for the associated factors of ever smokers among respondents**

Variable	AOR	CI lower	CI upper	P-value
Age group (in years)				
≤ 20	1.000			
21 – 30	0.585	0.218	1.567	0.282
31 – 40	3.410	1.476	7.878	0.003
> 40	0.673	0.222	2.042	0.482
Yes of exp (yrs)				
< 1	1.000			
1-5	3.000	0.782	11.504	0.097
6-10	4.000	1.109	14.432	0.026
11-20	4.375	1.050	18.234	0.031
>20	5.250	1.693	16.278	0.002



Discussion

- The prevalence of ever used tobacco amongst CA was 19.3%. This is comparable to the prevalence of smoking among unskilled workers in 30 other African countries which was 20.6%.
- However, it is lesser than the prevalence of tobacco use among blue-collar workers in the US (38%) and Brazil (72.4%).





Discussion

- Artisans who are within the age range 31-40 years were 4 times more likely to smoke.
- Gavioli et al. (2014)-age greater than 36 associated with smoking
- Moreover, artisans with more than five years of work experience were more likely to be smokers when compared with those with lesser years of working experience.
- Gavioli et al. (2014)-artisans more than 10 years experience had an increased risk of ever smoking tobacco



Limitation

- Self-reported information may lead to reporting bias.
- Triangulation could give information on the perception of artisans on smoking.



Conclusion

The prevalence of cigarette smoking was relatively higher amongst construction artisans than the general population.

There are medical, social, economic implications of this, and government must act to mitigate this unhealthy behavior in this group of workers for a better and healthier society



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References

Ogunsemi DR, Jagboro GO. Time-cost model for building projects in Nigeria. *Constr Manag Econ*. 2006;24(3):253-258. doi:10.1080/01446190500521041

Odediran SJ, Babalola O. Employment Structure of Informal Construction Workers/Artisans in Nigeria. Published online 2013:17.

Stress Management among Artisans in Construction Industry in Nigeria. :12.

Ekpo K, Okon A. Vocational Education and Economic Development in Nigeria. *AFRREV IJAH Int J Arts Humanit*. 2014;3(2):322-332. doi:10.4314/ijah.v3i2.20

Strickland JR, Smock N, Casey C, Poor T, Kreuter MW, Evanoff BA. Development of targeted messages to promote smoking cessation among construction trade workers. *Health Educ Res*. 2015;30(1):107-120. doi:10.1093/her/cyu050

Ham DC, Przybeck T, Strickland JR, Luke DA, Bierut LJ, Evanoff BA. Occupation and Workplace Policies Predict Smoking Behaviors: Analysis of National Data From the Current Population Survey. *J Occup Environ Med*. 2011;53(11):1337-1345. doi:10.1097/JOM.0b013e3182337778

Sreeramareddy CT, Pradhan PM, Sin S. Prevalence, distribution, and social determinants of tobacco use in 30 sub-Saharan African countries. *BMC Med*. 2014;12(1):243. doi:10.1186/s12916-014-0243-x

Mlinga RS, Wells J. Collaboration between formal and informal enterprises in the construction sector in Tanzania. *Habitat Int*. 2002;26(2):269-280. doi:10.1016/S0197-3975(01)00048-0

Hiscock R, Bauld L, Amos A, Fidler JA, Munafò M. Socioeconomic status and smoking: a review: Hiscock et al. *Ann N Y Acad Sci*. 2012;1248(1):107-123. doi:10.1111/j.1749-6632.2011.06202.x

Okechukwu CA, Nguyen K, Hickman NJ. Partner smoking characteristics: Associations with smoking and quitting among blue-collar apprentices. *Am J Ind Med*. 2010;53(11):1102-1108. doi:10.1002/ajim.20890