# Assessing Sexual Health Knowledge in an Urban Female Population, to Educate with a Digital Curriculum

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- Obtaining accurate facts related to sexual health can be a challenging task, due to variation in available resources. Search engines and social media outlets can offer effortless communication about virtually any topic of interest.
- Proficiency in basic reproductive health information is essential, especially in female populations. Urban communities often contain large numbers of female members from marginalized groups, who tend to be less proficient in sexual health topics.
- Our study aims to evaluate sexual health knowledge (SHK) in an urban female population, and determine how the prevalence of high-tech communications, as well as face-to-face connections, influences SHK values.



### **Methods**

A 50-item survey was crafted and administered to consenting adults, at two urban ambulatory care clinics.



Thirty-two of the inquiries captured demographic information such as: age, religious affiliation, race, marital status, income parameters, and household structure.

Participants were also asked the extent and form of social interactions (electronic and inperson) experienced, onaverage, weekly.

Data was analyzed using IBM SPSS. Statistical significance was established at p <0.05. One point was assigned for each correct knowledge-based question, creating an SHK score for each participant, with a minimum obtainable score of 0 and a maximum score of 18. Eighteen of the 50 questions were knowledge-based inquiries, with one correct response. These questions assessed proficiency with sexual and reproductive health knowledge.



## **Results**

- A total of **287 female patients** were surveyed
- The population had the following sociodemographics:
  - 85.7% African-American
  - 66.2% having incomes < \$50,000 USD
  - Mean (SD) age of  $55.3 \pm 14.8$  years
  - Mean (SD) education of  $14.2 \pm 2.5$  years of schooling
  - Mean (SD) SHK score of  $10.4 \pm 3.4$





#### **Age Distribution of Participants**



| Mean SHK Score By Age (N= 287) |                   |    |                       |  |  |  |  |
|--------------------------------|-------------------|----|-----------------------|--|--|--|--|
| Age Range<br>(in Years)        | Mean SHK<br>Score | Ν  | Standard<br>Deviation |  |  |  |  |
| 20-29                          | 11.33             | 18 | 3.34                  |  |  |  |  |
| 30-39                          | 11.37             | 30 | 3.24                  |  |  |  |  |
| 40-49                          | 11.00             | 40 | 3.52                  |  |  |  |  |
| 50-59                          | 10.72             | 68 | 3.04                  |  |  |  |  |
| 60-69                          | 10.08             | 83 | 3.65                  |  |  |  |  |
| 70-79                          | 9.00              | 40 | 3.69                  |  |  |  |  |
| 80-89                          | 9.25              | 8  | 3.45                  |  |  |  |  |





#### **Survey Population by Race (N=286)**



**Non- Hispanic African American Non- Hispanic Caucasian** Hispanic Asian

■ Native American

Other





| SHK Score by Number of In-Person and Digital Communications (N=277) |                   |     |                    |      |  |  |  |
|---|-------------------|-----|--------------------|------|--|--|--|
| Variable  | Mean SHK<br>Score | N   | Standard Deviation | Р    |  |  |  |
| Number of In-Person Communications (average)                        | -                 | 277 | -                  | .260 |  |  |  |
| ≤ 1 Per Week  | 10.13             | 71  | 3.79               |      |  |  |  |
| ≥ 2 Per Week  | 10.65             | 206 | 3.21               |      |  |  |  |
| Number of Digital Communications (average)                          | -                 | 278 | _                  | .001 |  |  |  |
| ≤ 10 Per Week   | 9.18              | 101 | 3.47               |      |  |  |  |
| ≥ 11 Per Week   | 11.30             | 177 | 3.37               |      |  |  |  |



### **Strengths and Limitations**

- The findings presented in this study are interesting, as those with increased levels of communication (both technological and in-person) obtained higher SHK scores.
- The observation that those with higher technological communication received enhanced SHK scores provides support in the validation of our crafted survey.
- Our survey findings may be limited, due to the fact that the participant population was disproportionately African-American. Due to racial limitations, our findings may not accurately represent the greater U.S. population, and comparable results may only be replicated in ethnically similar urban populations.



## **Conclusion**

- Our data exposes gaps of SHK, due to frequency and form of communications across age groups.
- Those who reported increased number of technological communications, as well as those reporting more in-person collaborations, on average received higher SHK scores.
- Further research efforts, to enhance the equity of delivering a digital SHK curriculum, are currently in progress.





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