INTRODUCTION

 object of this study was to develop a survey instrument to retrospectively assess transitions between use of moist smokeless tobacco (MST) and cigarettes. The instrument was designed to be an important research tool to examine switching behaviors and to assess transitions in adult tobacco use across a respondent’s adult life.

METHODS

Survey Design

The survey was developed to assess retrospective, adult (age 18+) use of MST and cigarettes.

The inclusion of personal life events and world events side recall for each year of a respondent’s adult life was central to the survey.

Respondents were asked to indicate their use of MST and cigarettes for each year, including (see Table 1):

- Average number of days per week MST was used
- Whether and when they completely quit smoking
- Whether and when they completely quit MST
- Methods used during cigarettes smoking and MST use
- Survey completion results in an unassisted individual lifetime use history of cigarettes and/or MST across the adult lifespan (see Figure 1).

Cognitive Testing

Cognitive interviewing improves the quality and accuracy of data collection instruments. Specifically, it can reveal the nature of cognitive dissonance to identify and correct potential sources of response error on the data collection instrument.

20 adult subjects (age 21+) who reported current (≥7-day) use of smokeless tobacco and reported smoking formerly (14, 100+ cigarettes to lifetime), so to construct the test 12 years after the completion of the cognitive interviewing efforts, to 2015, and a round 3.

During the testing, respondents were asked to identify any errors in response and potential causes of clarification, the interviewer used “think aloud” protocols and standard testing techniques based on these parameters.

- Comprehension
- Clarity
- Confidence
- Confirmation
- Confusion

We modified the instrument after each round of cognitive testing (see Table 1 for an overview of findings from cognitive testing).

Assessment of Reliability

Seven respondents completed the instrument a second time from home, approximately 1 week after the initial cognitive testing (see Figure 1 for respondent profiles).

Cognitive interviewing was used to determine that each component clause to measure interrater and test-retest reliability.

Gwet’s AC1 statistic served as the assessment of interrater reliability.

Gwet’s AC1 statistic has proven to provide a stable interrater reliability coefficient and is less affected by marginal distributions than Cohen’s kappa.

OBJECTIVES

1. Cognitive test and refine the survey instrument
2. Assess test-retest reliability of the survey instrument

RESULTS

Survey Design


SUMMARY AND CONCLUSIONS

- Through a combination of cognitive testing techniques and evaluation of test-retest reliability, we created a survey instrument that can capture, retrospectively, adult lifetime use of tobacco products.
- This survey instrument will be an important research tool to examine switching behaviors between MST and cigarettes.
- This survey finds it helpful to illustrate the relationship between oral tobacco use and intensity of use, cessation, and duration of use. See Poster #17 for survey results.

REFERENCES

2. Wongpakaran N et al. (2013). A comparison of Cohen’s Kappa and Gwet’s AC1 when calculating inter-rater reliability, we developed a survey instrument that can capture, retrospectively, adult lifetime use of tobacco products.

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