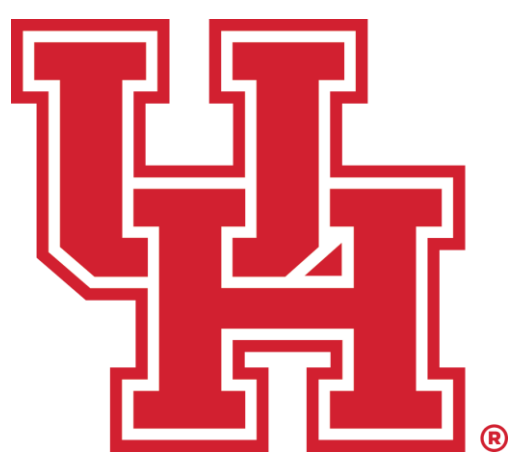


# A Culturally-Tailored Smoking Cessation Intervention for Latinos

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## Background

Leading causes of death among Latinos in the U.S include cancer (of which, lung cancer is the most frequented form of cancer death), heart disease, unintentional injuries, and stroke. Three of these four causes are associated with smoking. Compared to other ethnic and racial groups, Latinos face low smoking cessation treatment success due to:

- Under-utilization of existing services <sup>8</sup>
- Poor smoking cessation treatment outcomes <sup>9-10</sup>
- Low compliance with pharmacotherapy<sup>11-13</sup>
- Restricted accessibility to health care

Despite making up nearly 20% of the U.S population, few studies have explored smoking cessation interventions among Latino smokers. <sup>14</sup>

## Objective

Conduct a pilot study of a Culturally Tailored (CT), a CT plus Adherence Enhancing (AE), and a Health Education (HE) intervention for smoking cessation among Latino adults in the Greater Houston area. These tests will be randomized.

## Methods

### Participants

25 Latino smokers were recruited to participate in an 3-group Randomized Controlled Trial:



### Primary Aims

Evaluate the efficacy of the CT+AE condition, as compared to the HE and CT groups, on increasing nicotine patch use and abstinence rates at the end of treatment, 3 and 6 month follow-up.

### Procedures and Measures

All participants: 5 visits + 3 counseling sessions + 12 weeks of NRT

**Demographics:** Self-report demographic survey that also included general tobacco history items (i.e. CPD & lifetime quit attempts)

**Smoking:** The SRNT Abstinence Status Questionnaire<sup>15</sup> was used to captured 7-day point prevalence smoking abstinence at FU and was verified with expired CO testing. <sup>16-17</sup>

**Patch Use:** Self-report Timeline Followback (TLFB)<sup>18</sup> a calendar-based recall procedure used extensively in capturing substance use and other health-related behaviors. <sup>19</sup>

## Analytic Method

**Descriptive statistics** were summarized to characterize the sample. Treatment group differences on demographic, smoking, and retention variables were explored using Chi-square tests and **ANOVA** for continuous variables.

**Chi-square tests** were used to examine treatment group differences on abstinence rates at the end of treatment, 3 and 6 month follow-up using an intention-to-treat approach.

**ANOVA** was used to examine treatment group differences in the mean number of patch use days.

The Type 1 error rate was adjusted to account for the developmental nature of the study<sup>20</sup>. A significance threshold of  $\alpha = 0.2$  was used to evaluate **Fisher’s p-values**<sup>20</sup>.

## Results

Table 1: Participant Characteristics by Treatment Group

	Total (N=25)	HE (n=9)	CT (n=8)	CT+AE (n=8)	p value
Age <i>M</i> (SD)	44.1 (11.53)	45.4 (11.0)	46.0 (10.94)	40.7 (13.2)	.62
Female <i>n</i> (%)	10 (40)	4 (44.4)	3 (37.5)	3 (37.5)	.94
Spouse/Partner <i>n</i> (%)	18 (72)	7 (77.7)	4 (50)	7 (87.5)	.57
Employed <i>n</i> (%)	18 (72)	6 (66.7)	3 (37.5)	6 (75)	.32
Yrs. of Edu, <i>M</i> (SD)	11.8 (3.48)	12.7 (2.33)	11.3 (2.82)	11.2 (5.06)	.61
Baseline CPD, <i>M</i> (SD)	13.4 (6.33)	13.2 (6.14)	15.7 (6.5)	11.5 (6.39)	.41
Quit Attempts <i>M</i> (SD)	3.16 (3.07)	3.33 (3.42)	2.12 (2.99)	4 (2.82)	.48
Attended Visit 2 <i>n</i> (%)	22 (88)	9 (100)	7 (87.5)	6 (75)	.28
Attended Visit 3 <i>n</i> (%)	21 (84)	7 (77.8)	8 (100)	6 (75)	.32
Attended 3m. FU <i>n</i> (%)	20 (80)	8 (89.9)	6 (75)	6 (75)	.70
Attended 6m. FU <i>n</i> (%)	19 (76)	8 (88.9)	6 (75)	5 (62.5)	.44

High levels of attendance and retention rates indicated a success of intervention methods. Satisfaction survey results further confirmed the likeability of these trials.

At the 3-month follow-up:

- 44.4% (n=4) HE Group abstinent
- 25% (n=2) CT Group abstinent
- 50% (n=4) CT+AE Group abstinent

At the 6-month follow-up

- 44.4% (n=4) HE Group abstinent
- 25% (n=2) CT Group
- 37.5% (n=3) CT+AE Group abstinent

Average number of days of Nicotine Replacement Therapy use are as follows:

- HE group= 64
- CT group= 68
- CT+AE= 81

Those assigned to the CT+AE group had significantly greater NRT use means, suggesting the targeted adherence strategies and cultural sensitivity improved levels of nicotine patch use.

Table 2: Abstinence by Treatment Group (N=25)

	Total (n=25)	HE (n=9)	CT (n=8)	CT+AE (n=8)	P-value
End of Tx <i>n</i> (%)	7(28)	2(22.2)	3(37.5)	2(25)	.76
3 mo. FU <i>n</i> (%)	10(40)	4(44.4)	2(25.0)	4(50.5)	.56
6 mo. FU <i>n</i> (%)	9(36)	4(44.4)	2(25.0)	3(37.5)	.70
Patch use <i>M</i> (SD)	70.5(15.0)	64.6(17.7)	68.6(13.6)	81.3(3.3)	.09

## Conclusions

- When compared to RCTs of Latino smokers, all three groups of the study attained high rates of abstinence at follow-up. RCTs of Latino smokers have had abstinence rates from 17% to 22.5% at follow-up<sup>21</sup>.
- Rates were also high when related to RCTs in the general population testing NRT alone,<sup>22</sup> NRT + counseling,<sup>23-24</sup> Bupropion,<sup>25</sup> and Varenicline<sup>26</sup>.
- Although still preliminary, the CT+AE’s higher level of patch use proposes that the targeted adherence strategies contributed to better levels of NRT use.
- The results support the continued refinement and testing of the CT+AE intervention with larger samples.