Community Network Driven COVID-19 Testing of Vulnerable Populations in the Central US: A RADx-UP RCT 1095

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BACKGROUND

Community Network Driven COVID-19 Testing of Vulnerable Populations in the Central US (C3) is a multi-site Rapid Acceleration of Diagnostics Underserved Populations (RADx-UP) study designed to evaluate an intervention combining Social Network Strategy (SNS) with COVID-19 prevention education messages to improve COVID-19 testing and vaccination among criminal legal-involved (CLI) and/or low-income Hispanic/Latinx community members most impacted by COVID-19.

METHODS

- **Recruitment:** Peer referral across 8 study sites in the central US: Texas, Louisiana, Arkansas, Indiana and Illinois from April 2021 to December 2022.
  - Each index participant ("seed") could refer up to 6 network members.
  - Referrals continued for at least 3 waves (Figure 1).
- **Intervention:** Randomized 1:1 to SNS or SNS+, which included a staff-led activity to affirm participants' values and beliefs plus an educational video to correct misinformation about testing and vaccination.
- **Outcomes:** COVID-19 testing (primary) and/or vaccination (secondary outcome among unvaccinated participants) at 3 weeks post-baseline (Table 1).
- **Analyses:** Bivariate analysis compared participant characteristics across intervention arms to detect any baseline differences. Mixed effects logistic regression examined primary and secondary outcomes between arms, using random effects to adjust for site differences and level of recruitment degree/referral chain.

RESULTS

- **Baseline Characteristics:**
  - N = 1328 participants
  - n = 661 in SNS arm; n = 667 in SNS+ arm
  - 39.8% Black (n=529), 32.4% Hispanic/Latinx (n=430)
  - 41.6% (n=553) reported CLI prior to enrollment

Peer referral was successful in engaging diverse communities in COVID-19 testing and vaccination.
Adding *prevention education messaging* and *misinformation correction* did not increase testing or vaccination rates compared to a Social Network Strategy alone.

FIGURE 1. INTERVENTION ASSIGNMENT BY SEED/RECRUITMENT DEGREE

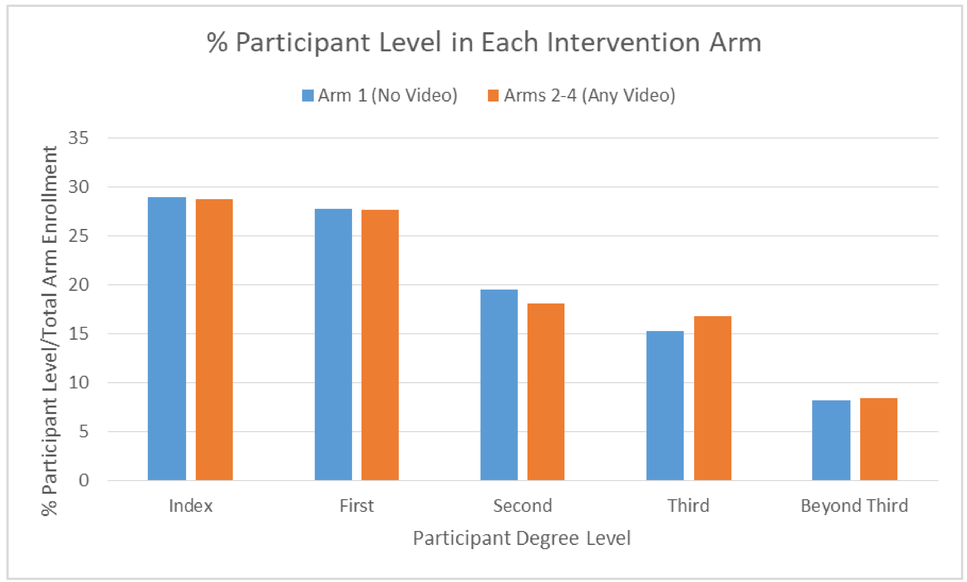

TABLE 1. COVID-19 OUTCOMES BY INTERVENTION ARM, AT 3 WEEKS FOLLOW-UP

COVID-19 Outcomes	Total (N=1328)	SNS arm (n=661)	SNS+ arm (n=667)	p-value
Tested (lab confirmed and self-report)[1]	881 (66.3%)	444 (67.2%)	437 (65.5%)	0.60
Vaccinated (self-report), if unvaccinated at baseline (n=378)[2]	45 (11.9%)	18 (9.8%)	27 (13.8%)	0.60

[1] Missing: Total (n=45, 3.4%), SNS Arm (n=21, 3.2%), SNS+ Arm (n=24, 3.6%)
[2] Missing: Total (n=158, 41.8%), SNS Arm (n=83, 45.6%), SNS+ Arm (n=75, 38.3%)

RESULTS (CONTINUED)

- There were no differences by sociodemographics (age, race/ethnicity, assigned sex at birth, gender identity) between intervention arms.
- There were no differences in referral chains by study assignment, with a third of the sample representing index/primary participants (Figure 1).
- More than half of the participants were tested (66.3%), and, of those participants unvaccinated at baseline, 11.9% reported vaccination by the three-week follow-up, with no differences across intervention arms.
- Compared to the SNS arm, there were no differences in testing (OR 0.92, 95% CI 0.73, 1.16, p=0.60) or vaccination rates (OR 1.41, 95% CI 0.75, 2.65, p=0.33) among participants nested within sites and within referral chains in the SNS+ arm.

CONCLUSIONS

- Adding educational material including testimonial videos and misinformation correction to the Social Network Strategy (SNS+) did not increase testing or vaccination compared to the SNS alone.
- Peer referral successfully engaged communities disproportionately impacted by COVID-19 in testing and vaccination. COVID-19 testing rates at follow-up were high among community members in both arms.
- Additional work is needed to address COVID-19 misinformation and implement SNS to increase vaccination rates among communities most impacted by COVID-19 in the US.

ADDITIONAL KEY INFORMATION

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https://clinicaltrials.gov/study/NCT04743908#contacts-and-locations
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