

### Evidence Tables

**Group:** Aisef Ahmed, Salma Benitez, Saima Afrin, Jeremy Chao, Tara Capo, Liza Ajvazi Llapashtica

**Evidence Table A: Significance of Health Issue**

| Why is Adolescent Pregnancy a significant public health issue? |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| Author(s), Year                                                | Research Method                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Findings Relevant to Selecting Health Issue                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Stribling, W. (2022)                                           | <ul style="list-style-type: none"> <li>● Focus: underserved areas in Mississippi with high poverty and limited health access</li> <li>● Method: Investigative journalism with qualitative interviews and policy reviews</li> <li>● Conducted interviews with               <ul style="list-style-type: none"> <li>○ Reproductive health professionals, educators and public health officials</li> <li>○ Adolescent girls impacted by a lack of sex education</li> <li>○ School policy reviews and health funding reports related to abstinence-only vs comprehensive sex education</li> </ul> </li> <li>● Analyzed public health data from               <ul style="list-style-type: none"> <li>○ CDC</li> <li>○ Mississippi State Department of Health</li> <li>○ State-by-state comparisons of teen birth rates</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>● Statistics               <ul style="list-style-type: none"> <li>○ Mississippi has the high teen birth rate in the United States (25.6 per 1,000 females aged 15-19)</li> </ul> </li> <li>● Population               <ul style="list-style-type: none"> <li>○ Black &amp; Hispanic teens face higher rates of teen pregnancy due to racial health disparities</li> </ul> </li> <li>● Barriers to reproductive health               <ul style="list-style-type: none"> <li>○ Underserved urban areas face systemic barriers when receiving comprehensive sex health education such as poverty, systemic racism and under funded schools                   <ul style="list-style-type: none"> <li>■ Examples- transportation &amp; cost of contraceptives</li> </ul> </li> <li>○ Mississippi does not require sex education                   <ul style="list-style-type: none"> <li>■ Approximately half of the public school districts are mandated to teach abstinence- only education which does not focus on contraceptives</li> </ul> </li> </ul> </li> <li>● Consequences               <ul style="list-style-type: none"> <li>○ Teen pregnancy leads to higher rates of “school dropout, unemployment, and intergenerational poverty”</li> <li>○ Babies experience high rates of low birth weight and infant mortality</li> </ul> </li> </ul> |

| Why is Adolescent Pregnancy a significant public health issue? |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| Elinor et al.<br>(2022)                                        | <p>The study was a <b>retrospective cohort analysis</b> conducted to provide a comprehensive assessment of maternal and neonatal complications associated with teen pregnancies in the United States. Data was obtained from the Centers for Disease Control and Prevention (CDC) Natality Live Births Database covering the years 2016 to 2019. The analysis included singleton live births to women under the age of 35 from four racial/ethnic groups: non-Hispanic White, non-Hispanic Black, non-Hispanic Asian, and Hispanic. Of the 15,379,982 live births recorded during the study period, 11,038,489 met the inclusion criteria. Among these, 661,062 births (6%) were to teen mothers younger than 20 years of age.</p> <p>The primary objective was to compare the risks of various maternal and neonatal complications between teen mothers (&lt;20 years old) and nonteen mothers (20–35 years old). <b>Pearson's chi-square tests with Bonferroni correction were used to assess differences in complication rates between the two groups.</b> Additionally, multivariate logistic regression models were applied to adjust for potential confounding variables, including maternal body mass index (BMI), race/ethnicity, method of payment, adequacy of prenatal care, parity, and the presence of chronic comorbidities.</p> | <p>In 2019, teen pregnancies in the U.S. were reported at a rate of 16.7 per 1,000 teenagers aged 15–19 years and .2 per 1,000 children aged 10–14 years. Overall, teen births constituted 4.6% of all live births in that year. All the differences between the teen and non-teen pregnancy groups were found to be statistically significant with a <math>p &lt; .001</math>. Teen patients had a lower prepregnancy body mass index, a higher proportion of non-Hispanic Black or Hispanic patients, and a higher proportion of Medicaid insurance than nonteen patients. Teen pregnancies were associated with delayed or absent prenatal care. Only 61.7% of teen mothers received prenatal care in the first trimester, compared with 78.1% of nonteen mothers.</p> <p>Teen pregnancy was significantly associated with increased risks for several adverse maternal outcomes. These included maternal blood transfusion eclampsia, hypertensive disorders of pregnancy, and sexually transmitted infections such as chlamydia and gonorrhea. Neonates born to teen mothers had higher risks of congenital anomalies, low 5-minute Apgar scores, need for immediate assisted ventilation and prolonged ventilation exceeding six hours, and suspected neonatal sepsis</p> <p>Interestingly, teen pregnancies were associated with decreased risks of unplanned hysterectomy, gestational diabetes, macrosomia, low birth weight, and NICU admission.</p> <p>Limitations</p> <ul style="list-style-type: none"> <li>• The data derived from birth certificates with a limited amount of information reported on them</li> <li>• Did not account for geographic location, such as urban vs rural area, which may also be an important factor</li> <li>• Available data on hypertensive disorders of pregnancy in the CDC database combines gestational hypertension with preeclampsia, limiting the study's ability to assess the odds for each condition individually</li> </ul> |

| Why is Adolescent Pregnancy a significant public health issue? |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| Bogan, Aranmolate & Mawson, 2020                               | <ul style="list-style-type: none"> <li>• Method: Narrative Literature Review with State-Level Data Analysis</li> <li>• Focus group <ul style="list-style-type: none"> <li>○ Adolescents aged 13–19 in under-resourced urban regions (Jackson, Delta Hills, Gulf Coast) with high teen birth rates</li> <li>○ Data is broken down into categories (age, race/ethnicity, geography)</li> </ul> </li> <li>• Analyzed public health data from <ul style="list-style-type: none"> <li>○ Mississippi Dept. of Health</li> <li>○ CDC</li> <li>○ Guttmacher Institute data <ul style="list-style-type: none"> <li>■ A leading nonprofit organization that focuses on sexual and reproductive health and rights in the United States and globally</li> </ul> </li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Nearly 50% teen moms heavily depend on public assistance such as Medicaid, WIC (Women, Infants &amp; Children), TANF (Temporary Assistance for Needy Families), and SNAP showing that many from this group cannot afford the costs that come with teen pregnancy</li> <li>• A teen mom is more likely to earn \$500,000 in incomes less in her lifetime than a mom that had pregnancy in her adulthood <ul style="list-style-type: none"> <li>○ This is due to a lack of higher education, lower wage jobs, and high rates of high-school dropouts</li> <li>○ In fact, teens that delay sex had a 8.6% school dropout rate, whereas those that had a teen pregnancy had a 21% dropout rate</li> <li>○ This demonstrates the sharp contrast between the low SES of teen moms and those who aren't teen moms which impacts the mom's educational attainment and overall incomes</li> </ul> </li> <li>• 62% of teen pregnancies were not planned and led to a loss of \$267 million statewide costs from healthcare, welfare, and tax revenue <ul style="list-style-type: none"> <li>○ A lot of these costs also come from public assistance that they depend on</li> </ul> </li> </ul> |

**Evidence Table B: Specific Priority Group**

| Which adolescent subpopulations in New Hampshire should be prioritized to reduce rates of teen pregnancy? |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| Author(s), Year                                                                                           | Research Method                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Findings Relevant to Selecting Priority Group                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Orimaye et al. (2021)                                                                                     | <p><b>Ecologic analysis of U.S. county data (2017–2018) relating adolescent birth rates to rurality, area deprivation, and Health Professional Shortage Areas</b></p> <p>Sources: Adolescent birth counts from the Centers for Disease Control and Prevention database and socioeconomic indicators from the American Community Survey for 2017–2018.</p> <p>Unit of analysis: All U.S. counties, including those in New Hampshire.</p> <p>Statistical approach: Multivariable linear regression predicting the number of births per 1,000 females aged 15–19, with predictors for degree of rurality, socioeconomic deprivation score, and shortage of health professionals; controlled for racial composition and median household income.</p> | <p>Rural counties experienced 7.8 more births per 1,000 females aged 15–19 than urban counties.</p> <p>Most-deprived counties had 23.1 additional births per 1,000.</p> <p>Counties lacking adequate health professional supply had 8.3 more births per 1,000 than adequately served counties.</p> <p>Rural adolescents in New Hampshire’s northern and western regions—where socioeconomic deprivation is high and health professional shortages are common—should be a primary focus for mobile clinics, telehealth contraceptive counseling, and expanded local family-planning services.</p> |
| Kilmer et al. (2022)                                                                                      | <p><b>Quasi-experimental “difference in differences” analysis of youth risk survey responses over time</b></p> <p>Data: National Youth Risk Behavior Survey waves from 2011 through 2017.</p> <p>Sample: Sexually active respondents aged 16–17, approximately 5,000 individuals per survey wave.</p> <p>Comparison: States that expanded Medicaid under the Affordable Care Act versus those that did not.</p> <p>Analysis: Regression with state and year fixed effects, comparing pre- and post-expansion changes in use of intrauterine devices, implants, and other highly effective methods; adjusted for individual demographics and state-level economic indicators.</p>                                                                 | <p>Use of intrauterine devices and implants increased by 283% in expansion states versus 69.7% in non expansion states (statistically significant).</p> <p>Overall uptake of the most effective contraceptive methods rose by 238% in expansion states versus 120% in non expansion states.</p> <p>Low income Medicaid eligible adolescents in New Hampshire can substantially increase use of highly effective contraception if insurance coverage barriers are removed; targeted support for enrollment and confidentiality will be key.</p>                                                   |

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| <p>Everett et al. (2019)</p>  | <p><b>Pooled, survey-weighted logistic regression of ten annual cycles of a national youth behavior survey (2005–2015)</b><br/> Data: Approximately 100,000 respondents per cycle, combined for an analytic sample of about 850,000.<br/> Exposure: Self-reported sexual orientation categories (heterosexual, lesbian or gay, bisexual, unsure).<br/> Outcomes: History of teen pregnancy, contraceptive use at last sexual activity (condoms and most/second-most effective methods), and substance use at last sexual activity.<br/> Models: Controlled for age, race and ethnicity, and survey year, with interaction tests for sexual orientation by gender.</p> | <p>Bisexual-identified girls had about 30% higher odds of reporting teen pregnancy than heterosexual peers.<br/> Girls unsure of their sexual orientation reported lower use of condoms and of the two most effective contraceptive methods, and higher rates of substance use during last sexual activity.<br/> Sexual minority youth in New Hampshire—especially bisexual and questioning adolescents—face higher pregnancy risk and should receive tailored, inclusive sexual health education and services that affirm their identities</p>                                                      |
| <p>Govender et al. (2018)</p> | <p><b>Scoping review following established framework for mapping broad research areas</b><br/> Databases searched: PubMed, PsycINFO, CINAHL, and Scopus for studies published between 2000 and 2018.<br/> Inclusion criteria: English-language studies addressing repeat adolescent pregnancy, of any study design.<br/> Screening: Two-stage review of titles and abstracts, followed by full-text review by two independent reviewers, resulting in 42 studies included.<br/> Data extraction: Charted study design, risk factors examined, and interventions tested; conducted thematic synthesis to identify common risk factors and gaps in interventions.</p>   | <p>Low socioeconomic status, single-parent family background, and peer networks that include teen parents were consistently identified as risk factors for repeat adolescent pregnancy.<br/> Lack of parental support and early initiation of sexual activity were strongly linked to both first and repeat teen pregnancies.<br/> Adolescents in single-parent or low-support households, and those whose friends include teen parents, are at elevated risk. New Hampshire should invest in family strengthening programs, peer mentoring, and community support to build protective networks.</p> |

**Evidence Table B: Specific Priority Group**

| <b>Which adolescent subpopulations in Mississippi should be prioritized to reduce rates of teen pregnancy?</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| <b>Author(s), Year</b>                                                                                         | <b>Research Method</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Findings Relevant to Selecting Priority Group</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| (Osterman et al.2023)                                                                                          | <p>This was an ecological study of the population of Mississippi for teen pregnancy.</p> <p>Sources: adolescent birth counts from the Centers for Disease Control and Prevention Database and socioeconomic indicators from the American Community Survey from 2017-2018.</p> <p>Unit of analysis: all U.S states, which includes Mississippi</p> <p>Satirical approach: multivariable linear regression, which predicts the number of births per 1,000 females aged between 15 and 19 years old. This included predictors such as rural and urban settings, socioeconomic deprivation score, and shortage of health professionals.</p>                                                                                                       | <p>Mississippi's teen birth rate (ages 15–19): In 2018, the rate was 27.8 births per 1,000 teen females, well above the U.S. national average of around 17.4 per 1,000</p> <p>More recent data from 2022 shows that Mississippi continues to have the highest teen birth rate among all states, at approximately 26.4 per 1,000 teen girls.</p> <p>While national teen birth rates declined by about 7% between 2020 and 2021, reaching a record low of 13.9 per 1,000, the decline appears less pronounced in Mississippi, leaving it far above the national average.</p>                                                                                                                                                                                                                                                                                                                                                           |
| (Mississippi State Department of Health, 2017).                                                                | <p>This was an ecological study analyzing the population data from Mississippi regarding adolescent pregnancy in 2017-2018, based on ethnicities and various age ranges from 10 to 19 years old.</p> <p>The source selected the teenage vital statistics data of Mississippi residents. Of a teen population of 2,984,100 participants ranging from 10 to 19 years old</p> <p>Statistical approach: descriptive observational study</p> <ul style="list-style-type: none"> <li>- Raw count: births based on the total reported amount per 1,000 female persons</li> <li>- 3 categories amongst the age of pregnancy included 10-14, 15-17, and 18-19</li> <li>- Divided into two ethnic categories, African American and caucasian</li> </ul> | <p>Older studies of teens (18–19) have shown that vital statistics data among residents of Mississippi account for most births, approximately 74% (2,341/3,175) of teen births from the total when comparing teen teenbirths between 18-19 over all accounted births from the analysis.</p> <p>Black adolescents face a notably higher risk: their pregnancy rate (~44.5) is nearly double that of white peers (~28.9).</p> <p>A notable proportion of pregnancies are repeats (~18%), highlighting the need for interventions beyond first pregnancy prevention.</p> <p>Health risks are elevated: high proportions of low birthweight, preterm birth, and inadequate prenatal care suggest both maternal and infant health concerns.</p> <p>Higher prevalence of teen pregnancy was reported amongst older teens between the ages of 18 and 19 years, where African American population was at an increased rate for pregnancy</p> |

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| <p>(“Mississippi - 2021 - III.B. Overview of the State”)</p> | <p>This was an ecological study analysis of the poverty rate per county within Mississippi</p> <p>The source selected counties from various parts of Mississippi to evaluate the poverty rate within each county and access to health insurance across every county.</p> <p>Statistical approach: descriptive and population-based analysis, which collected a consensus of the counties based on income per household. Components of the study included demographic factors such as Age, race/ethnicity per household during</p> | <p>According to the 2023 ACS data, Mississippi has the highest poverty rate of any state: roughly 18.7%–19.7% (compared to the national average of ~12.5%)</p> <p>Census data show that between 2009–2011 and 2019–2021, Mississippi's poverty rate dropped from ~21% to 18.1%, yet it remains among the worst in the nation.</p> <p>60% of Mississippi’s counties, especially in the western Delta region, have experienced persistent poverty (≥20% for 30+ years).</p> <p>Rural concentration: ERS maps confirm that extreme poverty clusters in rural Mississippi, particularly the Delta</p> <p>In 2018, 19.7% of Mississippi residents were at or below the federal poverty line, compared to the national rate of 11.8%</p> <p>The state's per capita income (2014–2018) was \$23,434, with a median household income of \$43,567</p> <p>Approximately 30% of children in Mississippi live in poverty, compared to 16% across the U.S.</p> <ul style="list-style-type: none"> <li>• The disparity is stark by race: 49% of Black/African American children vs. 16% of White, non-Hispanic children live in poverty.</li> </ul> <p>According to reports on access to healthcare within this region, 85.6% of Mississippi residents under the age of 65 have health insurance, while 14.4% are uninsured.</p> |
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**Evidence Table C: Specific Health Behavior**

| Which behavior(s) needs to be addressed to reduce adolescent pregnancy in underserved populations? |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| Nicholas D E Mark & Lawrence L Wu (2022)                                                           | <p>This was a <b>quasi-experimental design</b>, comparing teen birth rates in counties that received federal funding for comprehensive sex education (treated group) under the Teen Pregnancy Prevention Program (TPP) and counties that had not yet, or never received it (control group). Teen birth rates for individuals aged 14 to 19 were obtained using birth certificate records. To account for the time between conception and birth, counties were classified as "treated" starting in the year after they received funding.</p> <p><b>Difference-in-differences (DiD)</b> models were implemented to compare the groups and obtain causal estimates of the effects of sex education on teen birth rates.</p> <p>Model 1 includes county and state-by-year fixed effects, which compares counties that did and did not receive federal funding for sex education, within the same state and year. Model 2 builds on model 1 by including several county-level factors, such as distance to the nearest abortion provider, economic factors (unemployment, household income, poverty levels), the age of distribution between the females and the race and ethnicities between them. Lastly, model 3 expands on model 2 by adding county-specific linear time trends, which accounts for the previous changes in teen birth rates over time in each county.</p> | <p>Overall, counties that <b>received federal funding for comprehensive sex education saw a reduction in teen birth rates</b> by about 3.3%, compared to the counties that did not receive funding. Model 1 suggests that federal funding resulted in a statistically significant reduction of about 8.1% in county level birth rates. Model 2, which adjusted for factors that may change over time, shows a reduction of 8.6% and model 3, which adjusted for county-specific trends, is smaller at a 4.4% reduction.</p> <p>Regarding pre- and post-treatment years, there were no significant differences in trends pre-treatment, whereas in the first year post-treatment there was about a 1.5% reduction and about a 7% reduction in the fifth year after funding.</p> <p>The study showed a causal relationship between federal funding and lower teen birth rates, which added to evidence base by showing real-world, population-level impacts, something that complements the mixed results often seen in randomized controlled trials (RCTs).</p> <p>Limitations:</p> <ul style="list-style-type: none"> <li>• Did not assess individual-level exposure (how many adolescents actually received the intervention)</li> <li>• Did not elaborate on the content taught or effectiveness of individual programs</li> <li>• Did not assess teenagers' knowledge or attitudes about contraception and sexual health</li> </ul> |
| Manlove, J., Fish, H., & Moore, K. A. (2015).                                                      | <p>This study was a <b>systematic review</b> that evaluated 85 reproductive health interventions delivered to adolescents under age 18, excluding expectant or parenting teens. Inclusion criteria required programs to use <b>random assignment and intent-to-treat (ITT) analysis</b>, meaning all participants were analyzed regardless of participation level. Evaluations were from peer-reviewed publications, published and unpublished evaluation reports, and Child Trends' LINKS database, which includes over 700 social intervention programs focused on child and youth outcomes.</p> <p>Outcomes assessed included sexual initiation, sexual risk behaviors, contraceptive use, STI incidence, and pregnancy or birth rates. Programs were implemented in multiple settings: Schools (n=54), Clinics (n=26), Community-based organizations (n=20), other settings like homes and juvenile justice centers (n=18). Interventions were categorized into five types: abstinence-only,</p>                                                                                                                                                                                                                                                                                                                                                                      | <p>Out of 103 rigorous evaluations of 85 unique programs, school-based and clinic-based interventions demonstrated strong impacts on adolescent sexual health.</p> <p>Programs were most effective when targeting key behaviors: <b>delaying sexual initiation, increasing consistent condom and contraceptive use, and reducing pregnancy and STI rates</b>. Specifically, nine programs lowered pregnancy rates, five reduced STIs, and fifteen impacted both sexual activity and contraceptive use. Parent–youth relationship interventions and clinic-based programs showed the most consistent behavior change, followed by comprehensive sex education, which was effective but to a lesser extent.</p> <p>In terms of effectiveness, 38 programs demonstrated consistent, statistically significant positive outcomes, while 14 showed mixed results limited to certain subgroups, behaviors, or time points. These findings suggest that reducing adolescent pregnancy relies on strategies that delay sexual initiation, promote</p>                                                                                                                                                                                                                                                                                                                                                                                          |

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|                                                                                                          | <p>comprehensive sex education, clinic-based, youth development, and parent–youth relationship programs.</p> <p>Regarding data analysis, program evaluations were assessed for statistically significant impacts on reproductive health outcomes, including sexual initiation, contraceptive use, STIs, and pregnancy or birth rates. Each was analyzed by outcome type, time point (e.g., posttest, follow-up), and population subgroup (e.g., age, sex). Programs were categorized as “found to work” if they showed significant, consistent effects across most outcomes or subgroups; “mixed findings” if results varied by time or subgroup; and “not found to work” if effects were insignificant, inconsistent, or not sustained. All studies followed an intent-to-treat approach and were independently reviewed by at least two researchers to ensure coding accuracy. Final classifications were summarized to distinguish effective from ineffective interventions.</p>                                                                                                                                                                                                                                                                                                                     | <p>contraceptive use, foster parent–teen communication, and expand clinic-based access.</p> <p>Integrating these elements into comprehensive school-based sex education can promote healthier adolescent behaviors and improve reproductive outcomes.</p> <p>Limitations:<br/>The included programs varied widely in content, duration, and setting, which limits comparability across evaluations. Some outcomes were measured only at short-term follow-up or in specific subgroups, affecting generalizability. Additionally, the review did not assess program fidelity, dosage, or participant-level engagement, which may influence effectiveness.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <p>Jennifer Yarger, Abigail Gutmann-Gonzalez, Natasha Borgen, Julio Romero, and Martha Decker (2023)</p> | <p>The study used a <b>cluster randomized controlled trial (CRT)</b> design to evaluate the effects of a hybrid sexual education program called <i>In The Know</i>, which combined in-person sessions with digital tools. The design included 1,263 adolescents aged 13-19 in 95 cohorts, implemented in community-based organizations and schools throughout Fresno County, CA, particularly from <b>underserved areas</b>. Participants were randomly assigned to either the treatment group (<i>In The Know</i>) or control group. They were surveyed at three points: baseline, 3 months, and 9 months after the intervention (in-person sessions plus one month of follow-up text messages).</p> <p>In regard to statistical analysis, the study used an <b>intention-to-treat</b> approach, where the researcher who conducted the analysis was blinded to the study arms. A two-sided p value with <math>p &lt; 0.05</math> level of significance was used. The study used two-level mixed-effects regression models (<b>multilevel modeling</b>) with random intercepts for cohort. This statistical approach adjusts for intracluster correlation and properly estimates the intervention’s effect on outcomes such as unprotected sex, clinical service use, and sexual health knowledge.</p> | <p>The <i>In the Know</i> program, designed to improve sexual health outcomes among adolescents (particularly those in underserved communities) through a hybrid, youth-centered approach, <b>successfully improved clinical service utilization and sexual health knowledge</b> among adolescents, but <b>did not significantly reduce unprotected sex</b> within the 3-month follow-up period.</p> <p>Use of clinical health services, such as condoms, contraception, pregnancy tests, STI testing or treatment, and HIV testing, increased significantly in intervention patients (42.7%) compared to control patients (33.2%). Sexual health knowledge also improved among the intervention group (57.6% correct answers) compared to the control group (50.7 correct answers), based on questions about sexual health items.</p> <p>Limitations:</p> <ul style="list-style-type: none"> <li>• <b>Short follow up period:</b> only 3 months post-intervention, which may not have been long enough to detect long term behavioral changes, such as condom use</li> <li>• No program impact on knowledge of where to receive sexual health services, possibly due to the lack of clinical services in many of the communities served</li> <li>• <b>High attrition:</b> The onset of the COVID-19 pandemic during the follow-up period created significant challenges for data collection, resulting in a notable overall attrition rate of 33.9% and a differential attrition of 6.9 percentage points between groups. <ul style="list-style-type: none"> <li>◦ Additionally, the pandemic may have influenced study outcomes and altered the program’s effectiveness due to factors such as <b>social distancing requirements and reduced</b></li> </ul> </li> </ul> |

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|  |  | <p><b>availability of health services</b> as clinics closed or limited operations.</p> <ul style="list-style-type: none"><li>● <b>38% of sessions required unplanned adaptations</b> due to technology problems, classroom issues, or time constraints.</li></ul> |
|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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