

## STROBE Statement—Checklist for Cross-Sectional Studies

### Vaccine Hesitancy Toward Childhood Vaccination in the Madinah Region, Saudi Arabia: A Cross-Sectional Study

<b>Title and abstract</b>		
<b>1(a)</b>	Indicate the study's design with a commonly used term in the title or the abstract	Title (Lines 1-2); Abstract (Lines 11-12)
<b>1(b)</b>	Provide in the abstract an informative and balanced summary of what was done and what was found	Abstract (Lines 5-31): structured with Background, Objective, Methods, Results, Conclusion
<b>Introduction</b>		
<b>2</b>	Explain the scientific background and rationale for the investigation being reported	Lines 33-68: Four paragraphs covering vaccination importance, Saudi context, PACV validation, and research gap
<b>3</b>	State specific objectives, including any prespecified hypotheses	Lines 64-68: Clear statement of study aims
<b>Methods</b>		
<b>4</b>	Present key elements of study design early in the paper	Lines 72-75: Study design and setting in first methods paragraph
<b>5</b>	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Lines 72-75: Study period (December 2024-March 2025); Lines 87-93: Five healthcare facilities with geographic clusters
<b>6(a)</b>	Cross-sectional study—Give the eligibility criteria, and the sources and methods of selection of participants	Lines 77-85: Detailed inclusion/exclusion criteria; Lines 87-93: Convenience sampling from five facilities
<b>6(b)</b>	For matched studies, give matching criteria and number of controls per case	N/A (no matching performed)
<b>7</b>	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers	Lines 100-115: PACV questionnaire details, scoring ( $\geq 50$ = hesitant), sociodemographic variables
<b>8*</b>	For each variable of interest, give sources of data and details of methods of assessment	Lines 100-107: PACV domains; Lines 108-115: Scoring methodology; Lines 117-126: Data collection (paper/electronic)
<b>9</b>	Describe any efforts to address potential sources of bias	Lines 123-126: Completeness review, double data entry; Lines 147-156: Ethical safeguards, voluntary participation
<b>10</b>	Explain how the study size was arrived at	Lines 94-98: Sample size calculation (95% CI, 5% margin, 30% expected prevalence → 323 required)
<b>11</b>	Explain how quantitative variables were handled in the analyses	Lines 128-132: Descriptive statistics; Lines 133-140: PACV dichotomization at

		≥50; Lines 108-111: 0-100 scale conversion
<b>12(a)</b>	Describe all statistical methods, including those used to control for confounding	Lines 127-145: Detailed statistical analysis (bivariate and multivariate methods)
<b>12(b)</b>	Describe any methods used to examine subgroups and interactions	Lines 133-140: Bivariate analysis by hesitancy status
<b>12(c)</b>	Explain how missing data were addressed	Lines 84-85: Exclusion of incomplete responses; Lines 123-124: Completeness review
<b>12(d)</b>	Cross-sectional study—Describe analytical methods taking account of sampling strategy	Lines 137-140: Multivariate logistic regression to adjust for confounding
<b>12(e)</b>	Describe any sensitivity analyses	Lines 141-145: Hosmer-Lemeshow test, VIF for multicollinearity, AUC-ROC
<b>Results</b>		
<b>13(a)</b>	Report numbers of individuals at each stage of study	Lines 160-161: 356 approached, 322 completed (90.4% response); Figure 1
<b>13(b)</b>	Give reasons for non-participation at each stage	Line 161: References Figure 1 showing exclusions with reasons
<b>13(c)</b>	Consider use of a flow diagram	Line 161: Figure 1 (STROBE participant flow diagram)
<b>14(a)</b>	Give characteristics of study participants and information on exposures and potential confounders	Lines 162-165: Age, gender, marital status, education; Table 1: Detailed stratification by hesitancy
<b>14(b)</b>	Indicate number of participants with missing data for each variable of interest	Lines 84-85, 123-124: Incomplete responses excluded; N=322 indicates complete data
<b>15*</b>	Cross-sectional study—Report numbers of outcome events or summary measures	Lines 167-171: 89/322 (27.6%, 95% CI: 23.0-32.7%) hesitant; Mean PACV scores by group
<b>16(a)</b>	Give unadjusted estimates and confounder-adjusted estimates with precision	Lines 173-184: Bivariate results (Table 1); Lines 190-202: Adjusted ORs with 95% CIs (Table 2)
<b>16(b)</b>	Report category boundaries when continuous variables were categorized	Lines 110-111, 167-171: PACV score ≥50 for hesitancy classification
<b>16(c)</b>	If relevant, translate estimates of relative risk into absolute risk	N/A (cross-sectional design; ORs appropriate)
<b>17</b>	Report other analyses done	Lines 187-189: Model diagnostics; Lines 203-211: Information sources (Table 3); Lines 212-220: Domain analysis (Table 4, Figure 4)
<b>Discussion</b>		
<b>18</b>	Summarise key results with reference to study objectives	Lines 223-231: 27.6% prevalence, comparisons to other regions and countries
<b>19</b>	Discuss limitations of the study, taking into account sources of potential bias	Lines 276-285: Six limitations (selection bias, cross-sectional design, social desirability, temporal, cultural)

<b>20</b>	Give a cautious overall interpretation considering objectives, limitations, and other evidence	Lines 223-275: Discussion of findings with literature; Lines 286-302: Evidence-based recommendations
<b>21</b>	Discuss the generalisability (external validity) of the study results	Lines 276-279: Selection bias discussion; Lines 283-285: Cultural variations; Lines 316-319: Madinah's unique context
<b>Other information</b>		
<b>22</b>	Give the source of funding and the role of the funders	Lines 341-342: No specific grant funding received