

## Supplementary File 2

### Qualitative Interview Guide (Mother and Daughter Versions)

#### Title:

Semi-Structured Interview Guide for Mother–Daughter Dyads

#### Interview Protocol Introduction

*(Read verbatim by the interviewer)*

“Thank you for agreeing to participate in this interview. This interview was conducted as part of a research study that aimed to better understand how Muslim families made decisions about health prevention, including the HPV vaccine. There were no right or wrong answers. We were interested in your personal views and experiences. All information shared during the interview was kept strictly confidential. The interview lasted approximately 45–60 minutes. You were free to decline to answer any question and could stop the interview at any time. Before we began, did you have any questions?”

#### Section A: Exploration of Beliefs and Decision-Making (Core Questions)

##### 1. Opening Question

Participants were asked to describe, in their own words, what came to mind when they heard about the “HPV vaccine.”

#### Probes:

- Where had you first heard about it?
- What was your initial reaction?

##### 2. Religious and Cultural Framing

#### For Mothers:

Participants were asked how their Islamic beliefs influenced their thinking about their daughter’s health and the prevention of future illness.

#### For Daughters:

Participants were asked how their faith and family values influenced how they thought about taking care of their health.

#### Probes:

- How did you balance the concept of divine decree (*qadar*) with taking practical action to maintain health?

- Were there specific Islamic teachings or principles that you considered when thinking about this issue?

### **3. Modesty and the Body**

Participants were informed that the HPV vaccine was often discussed as a preventive measure against cervical cancer, which is associated with a virus, and were asked how the nature of this virus affected their feelings about the vaccine.

#### **Probes:**

- How important was it for you or your daughter to have a female healthcare provider for such matters, and why?
- What did modesty (*hayā'*) mean to you in a healthcare setting?

### **4. Information Sources and Influences**

Participants were asked about the types of information they had encountered regarding the HPV vaccine and the sources of that information (e.g., healthcare providers, family members, friends, social media, religious leaders).

#### **Additional Questions:**

- Which information did you find most convincing or most concerning?

#### **Probes:**

- Had you heard claims about side effects or religious permissibility?
- How did you evaluate or assess the credibility of the information you received?

## **Section B: Dyadic Communication and Intervention Preferences**

### **5. Family Decision-Making**

#### **For Mothers:**

Participants were asked how they had discussed the topic of the HPV vaccine with their daughter and how that conversation unfolded.

#### **For Daughters:**

Participants were asked how they had discussed the topic with their mother and how the conversation unfolded.

#### **Probes:**

- Were other family members involved in these decisions?
- What factors made these conversations easier or more difficult?

## **6. Envisioning a Supportive Intervention**

Participants were asked to describe what ideal information would have looked like if they had sought additional guidance to make a comfortable decision.

### **Probes:**

- What topics should such information have covered?
- Who should have delivered it (e.g., physician, religious scholar, community health worker)?
- What format would have been most effective (e.g., small group workshop, private consultation, video, booklet)?

Participants were also asked to describe what a healthcare visit would have needed to be like for them to feel fully respected and comfortable.

## **Section C: Closing**

### **7. Final Reflection**

Participants were asked whether there was anything important about their perspective that had not been discussed during the interview.

## **8. Interview Conclusion**

*(Read by the interviewer)*

### **Brief Neutral Summary Provided at Interview Conclusion**

The next steps in this research involved carefully analyzing all interviews to identify shared themes and experiences. The findings were intended to inform the development of culturally and religiously sensitive resources and recommendations. The results were planned to be shared with the community and disseminated through academic publications to contribute to improved understanding of healthcare decision-making.