

Appendix1. Open ended questions used interview for this study: Mothers' awareness in the cervical cancer prevention for adolescent daughters

1. Key question

“Would you tell me that understanding of cervical cancer and opinions of cervical cancer prevention of your adolescent girl?”

2. Additional questions

a.” What do you know about cervical cancer? Do you know the causes and ways of prevention of cervical cancer? Do you know the relationship between HPV, sexually transmitted infection and cervical cancer? Where did you get information about the cervical cancer?”

b. “What do you know about the Pap test? Did you ever have the Pap test before? Were there any positive or negative feeling toward the Pap when you had?”

c. “What do you know the HPV vaccine and vaccination for adolescent prior to sex?”

d. ”What do you think of cervical cancer prevention for your daughter? How important are preventing daughter' cervical cancer? What do you think of HPV vaccination and the Pap test for your daughter? Are there any methods?”

e. “Were there ever talking your daughter about cervical cancer or its related sex topic in the family? What did you experienced in the communication with that?”

f. “What do you think of your role or parental role in cervical cancer prevention of daughter?”

“Did you have any difficulties or problems in cervical cancer prevention of your daughter?”

g. “Would you recommend the ways of expanding cervical cancer prevention for Korean adolescents?”

2. Appendix 2. General characteristics of participants

Participants	Gender/ Age	Numbers and age of daughter	Daughter' HPV vaccination	Education	Religion	Job status	Monthly income (USD)
A	F/ 46	1;18	No	University	Christianity	Housewife	4000
B	F/ 44	1;14	No	University	Christianity	Financial planner	4000
C	F/ 48	1;15	No	University	Christianity	Housewife	4000
D	F/ 46	1;15	No	Middle school	Christianity	Service	3000
E	F/ 42	2;13,16	No	High school	Christianity	Part time	1600
F	F/ 43	1;15	No	High school	Christianity	Financial planner	3500
G	F/ 47	1;16	No	University	Christianity	Housewife	No answer
H	F/ 41	1;17	Yes	High school	Buddhist	Housewife	2000
I	F/ 49	1;17	Yes	University	Buddhist	Teacher	No answer