

KNOWLEDGE, ACCEPTANCE, AND WILLINGNESS TO PAY TOWARDS HUMAN PAPILLOMA VIRUS (HPV) VACCINE FOR ADULT WOMEN IN DAERAH ISTIMEWA YOGYAKARTA PROVINCE INDONESIA

Fatimah Endriyanti

ABSTRACT

Background: The fourth most common cancer among women is cervical cancer, with around 90% of the new cases and fatalities globally took place in low-and middle-income countries, including Indonesia. It can be prevented earlier by HPV vaccination, which has proven safe and cost effective. The newest recommendation is of targeted ages 9 – 45 years old for HPV vaccination, since women in those ages can still develop new infection.

Objective: This study aims to measure the knowledge level, acceptance, and Willingness to Pay (WTP) towards HPV vaccine for adult women.

Method: A cross-sectional online survey was sent to 18-45 years old women in three districts and one city in Daerah Istimewa Yogyakarta province, Indonesia. Participants completed questions about HPV related knowledge, acceptance to HPV vaccination and willingness to pay for bivalent and quadrivalent vaccine.

Result: Of a total 472 respondents, 57.2% reported have low knowledge level. The acceptance for bivalent and quadrivalent vaccines are 93.9% and 93.4%, respectively. The Mean (SD) of WTP in out-of-pocket scenario for bivalent vaccine was Rp384,565 (\pm Rp365,642) or \$24.8 (\pm \$23.6) with the Median (Range) was Rp250,000 (Rp20,000–Rp2,000,000) or \$16.13 (\$1.3–\$129.0). The Mean (SD) of WTP in out-of-pocket scenario for quadrivalent vaccine was Rp475,296 (\pm Rp454,806) or \$30.66 (\pm \$29.34) with the median (range) was Rp300,000 (Rp20,000–Rp2,300,000) or \$19.35 (\$1.3–\$148.4). The Mean (SD) of WTP in co-payment scenario was 33.49% (\pm 19.8%) with the Median (Range) was 25.00% (5%–100%). Education, working-field, and monthly income significantly associated with knowledge level. The acceptance was influenced by residence and insurance status. WTP was strongly associated with monthly income, residence, age-range, insurance status, and education. There was significant difference in the mean WTP amount of bivalent vaccine in rural-urban groups ($p=0.018$), primary-higher education groups ($p=0.017$), and low-income and middle-high income groups ($p=0.000$). For quadrivalent vaccine, there was significant difference in rural-urban groups ($p=0.012$), primary-higher education groups ($p=0.002$), low-income and middle-high income groups ($p=0.000$), health sector workers-non health sector workers ($p=0.020$), and insured-uninsured groups ($p=0.033$).

Conclusion: Adult women's WTP in DIY province was high when the vaccine was offered in co-payment and fully funded by government scenario, even though their knowledge about HPV was low. The elicited WTP amounts with out-of-pocket scenario were far below current market prices. Interventions to address barriers of increasing knowledge and WTP required policy makers to create proper decision making.

Keywords: Human Papilloma Virus, Cervical Cancer, Vaccine, Willingness to Pay, Knowledge, Acceptance.