**Additional file 1.** Socioeconomic status and characteristics of children by self-paid vaccine uptake (n=1,282)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Mumps vaccine uptake | |  | Influenza vaccine uptake | |
|  | Crude OR (95% CI) | aORa (95% CI) |  | Crude OR (95% CI) | aORb (95% CI) |
| **Socioeconomic status** |  |  |  |  |  |
| Household member per 1 member | **0.73 (0.65–0.81)** | 1.16 (0.99–1.37) |  | **0.88 (0.79–0.97)** | 1.00 (0.85–1.18) |
| Siblings per 1 member | **0.52 (0.45–0.60)** | **0.43 (0.23–0.79)** |  | **0.78 (0.68–0.89)** | 0.77 (0.44–1.33) |
| Father’s age per 1 year | 1.01 (0.99–1.03) |  |  | **1.02 (1.01–1.04)** | **1.01 (0.99–1.04)** |
| Mother’s age per 1 year | **1.05 (1.02–1.07)** | **1.08 (1.05–1.11)** |  | **1.04 (1.01–1.06)** | **1.04 (1.00–1.07)** |
| Father’s education level ≥university | **2.01 (1.60–2.51)** | **1.61 (1.23–2.09)** |  | **1.77 (1.41–2.21)** | **1.55 (1.21–1.98)** |
| Mother’s education level ≥university | **1.81 (1.43–2.29)** | 1.27 (0.96–1.67) |  | **1.56 (1.24–1.97)** | 1.27 (0.98–1.64) |
| Mother’s employment | 0.74 (0.58–0.94) |  |  | 1.22 (0.96–1.54) |  |
| Household income below \4,000,000 | **0.67 (0.53–0.84)** | **0.69 (0.53–0.89)** |  | 0.92 (0.73–1.15) |  |
| ***Children’s characteristics*** |  |  |  |  |  |
| Birth weight <2500 g | 1.20 (0.82–1.77) |  |  | 1.05 (0.72–1.54) |  |
| Birth order per 1 order | **0.53 (0.46–0.62)** | 0.91 (0.50–1.66) |  | **0.79 (0.69**–**0.91)** | 0.97 (0.56–1.69) |
| Daycare use | **0.79 (0.63–0.99)** | 0.91 (0.71–1.17) |  | 1.22 (0.97–1.52) |  |
| Have primary diseases | 0.95 (0.74–1.21) |  |  | 0.95 (0.75–1.22) |  |

CI; confidence interval, OR; odds ratio; aOR, adjusted odds ratio.

a Adjusted for household member (per one member), siblings (per one member), mother’s age (per 1 year), parental educational level ≥university (yes/no [reference]), household income below \4,000,000 (yes/no), birth order (per one order), and daycare use.  
b Adjusted for household member(per one member), siblings (per one member), mother’s age (per 1 year), parental educational level ≥university (yes/no [reference]), and birth order (per one order).

**Additional file 2.** Affordable cost of a full vaccination course among parents who did not vaccinate their children because of the high cost. (n=105）

|  |  |  |
| --- | --- | --- |
| Free | 44 | (41.9%) |
| Less than \5,000 | 52 | (49.5%) |
| Less than \10,000 | 9 | (8.6%) |
| Less than \20,000 | 0 | (0%) |

**Additional file 3.** Household income categories and their medians (n=991)

|  |  |  |  |
| --- | --- | --- | --- |
| Household income | n | (%) | median |
| Less than \2,000,000 | 17 | 1.7 | ¥1,000,000 |
| \2,000,000–3,999,999 | 162 | 16.3 | ¥3,000,000 |
| \4,000,000–5,999,999 | 386 | 39.0 | ¥5,000,000 |
| equal to or above \6,000,000 | 426 | 43.0 | ¥9,272,912 |