**Supplementary Table 4:** P values for *S. japonicum* prevalence, Hunan province only, based on real-time PCR (qPCR) data

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Sex** |  | **Male** |  | **p <0.05** |  |  |  |  |  |  |
|  | **Female** | 0.5712 |  |  |  |  |  |  |  |  |
|  | **Province** |  | **Hunan** |  |  |  |  |  |  |  |  |
|  | **Jiangxi** | <0.0001 |  |  |  |  |  |  |  |  |
|  | **Hunan** | **Villages** | Longwang | Xiangjiang | Zhangshu | Changjiang | Ganzhou | Xincheng | Dongtinghong | Xinggang |  |
|  | Longwang | na | na | na | na | na | na | na | na |  |
|  | Xiangjiang | 0.708 | na | na | na | na | na | na | na |  |
|  | Zhangshu | 0.0004 | 0.0019 | na | na | na | na | na | na |  |
|  | Changjiang | <0.0001 | <0.0001 | 0.077 | na | na | na | na | na |  |
|  | Ganzhou | 0.0002 | 0.0011 | 0.9734 | 0.0073 | na | na | na | na |  |
|  | Xincheng | 0.0029 | 0.0115 | 0.517 | 0.0016 | 0.4807 | na | na | na |  |
|  | Dongtinghong | <0.0001 | <0.0001 | 0.0327 | 0.5974 | 0.0315 | 0.008 | na | na |  |
|  | Xinggang | <0.0001 | <0.0001 | 0.0039 | 0.7585 | 0.0037 | 0.0008 | 0.4105 | na |  |
|  |  |  | <10 | 10 - 20 | 20 - 40 | 40 - 60 | >60 |  |  |  |  |
|  | **Age group** | <10 | na | na | na | na | na |  |  |  |  |
|  | 10 - 20 | 0.2566 | na | na | na | na |  |  |  |  |
|  | 20 - 40 | 0.1187 | 0.7882 | na | na | na |  |  |  |  |
|  | 40 - 60 | 0.3668 | 0.2147 | 0.0730 | na | na |  |  |  |  |
|  | >60 | 0.2774 | 0.3644 | 0.2716 | 0.8787 | na |  |  |  |  |
|  |  |  | Illiterate | Primary school | Middle-high school | College |  |  |  |  |  |
|  | **Education** | Illiterate | na | na | na | na |  |  |  |  |  |
|  | Primary school | 0.4983 | na | na | na |  |  |  |  |  |
|  | Middle-high school | 0.1945 | 0.3715 | na | na |  |  |  |  |  |
|  | College | 0.1307 | 0.3715 | 0.327 | na |  |  |  |  |  |
|  |  |  | Farmer/fisher | Business/teacher | Student/child | Unemployed | Other |  |  |  |  |
|  | **Occupation 2** | Farmer/fisher | na | na | na | na | na |  |  |  |  |
|  | Business/teacher | 0.5022 | na | na | na | na |  |  |  |  |
|  | Student/child | 0.3198 | 0.3042 | na | na | na |  |  |  |  |
|  | Unemployed + other | <0.0001 | <0.0001 | - | na | na |  |  |  |  |
|  |  |  | Home latrine | Public latrine | Field | Marsh or lake | Other | Unknown |  |  |  |
|  | **Defecate 2** | Home latrine | na | na | na | na | na | na |  |  |  |
|  | Public latrine | 0.0001 | na | na | na | na | na |  |  |  |
|  | Field | 0.0513 | 0.0872 | na | na | na | na |  |  |  |
|  | Marsh or lake | - | - | - | na | na | na |  |  |  |
|  | Other | - | - | - | - | na | na |  |  |  |
|  | Unknown | - | - | - | - | - | na |  |  |  |
|  |  |  | No | 1-5 episodes/fortnight | >5 episodes/fortnight | Don't know |  |  |  |  |  |
|  | **Diarrhoea** | No | na | na | na | na |  |  |  |  |  |
|  | 1-5 episodes/fortnight | 0.0223 | na | na | na |  |  |  |  |  |
|  | >5 episodes/fortnight | 0.0001 | 0.7723 | na | na |  |  |  |  |  |
|  | Don't know | <0.0001 | <0.0001 | - | na |  |  |  |  |  |
|  |  |  | No | 1-5 episodes/fortnight | >5 episodes/fortnight | Don't know |  |  |  |  |  |
|  | **Weakness** | No | na | na | na | na |  |  |  |  |  |
|  | 1-5 episodes/fortnight | 0.5518 | na | na | na |  |  |  |  |  |
|  | >5 episodes/fortnight | <0.0001 | 0.0025 | na | na |  |  |  |  |  |
|  | Don't know | <0.0001 | <0.0001 | - | na |  |  |  |  |  |
|  |  |  | No | 1-5 episodes/fortnight | >5 episodes/fortnight | Don't know |  |  |  |  |  |
|  | **Fever** | No | na | na | na | na |  |  |  |  |  |
|  | 1-5 episodes/fortnight | 0.9996 | na | na | na |  |  |  |  |  |
|  | >5 episodes/fortnight | 0.217 | 0.9996 | na | na |  |  |  |  |  |
|  | Don't know | 0.4339 | 0.9996 | 0.9176 | na |  |  |  |  |  |
|  |  |  | Yes | No | Don't know | |  |  |  |  |  |
|  | **HepB** | Yes | na | na | na |  |  |  |  |  |  |
|  | No | <0.0001 | na | na |  |  |  |  |  |  |
|  | Don't know | <0.0001 | <0.0001 | na |  |  |  |  |  |  |
|  |  |  | Yes | No | Don't know |  |  |  |  |  |  |
|  | **Ever had schistosomiasis** | Yes | na | na | na |  |  |  |  |  |  |
|  | No | 0.0035 | na | na |  |  |  |  |  |  |
|  | Don't know | <0.001 | - | na |  |  |  |  |  |  |
|  |  |  | Yes | No | Don't know |  |  |  |  |  |  |
|  | **Had advanced schistosomiasis** | Yes | na | na | na |  |  |  |  |  |  |
|  | No | 0.9995 | na | na |  |  |  |  |  |  |
|  | Don't know | - | - | na |  |  |  |  |  |  |
|  |  |  | Yes | No | Don't know |  |  |  |  |  |  |
|  | **Had acute schistosomiasis** | Yes | na | na | na |  |  |  |  |  |  |
|  | No | - | na | na |  |  |  |  |  |  |
|  | Don't know | - | - | na |  |  |  |  |  |  |
|  |  |  | Yes | No | Don't know |  |  |  |  |  |  |
|  | **Treated for schistosomiasis last 2 years** | Yes | na | na | na |  |  |  |  |  |  |
|  | No | 0.5240 | na | na |  |  |  |  |  |  |
|  | Don't know | <0.0001 | - | na |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | <5 | 5-10 | >10 <20 | >20 | 0 | Unknown |  |  |  |
|  | **Total number of previous Schistosomiasis treatments** | <5 | na | na | na | na | na | na |  |  |  |
|  | 5-10 | 0.8884 | na | na | na | na | na |  |  |  |
|  | >10 <20 | 0.5332 | 0.6665 | na | na | na | na |  |  |  |
|  | >20 | 0.4613 | 0.4938 | 0.6043 | na | na | na |  |  |  |
|  | 0 | 0.0047 | 0.073 | 0.2858 | 0.8578 | na | na |  |  |  |
|  | Unknown | <0.0001 | <0.0001 | <0.0001 | <0.0001 | - | na |  |  |  |
|  |  |  | <5 | 5-10 | 10-20 | >20 |  |  |  |  |  |
|  | **Years worked in this village** | <5 | na | na | na | na |  |  |  |  |  |
|  | 5-10 | <0.0001 | na | na | na |  |  |  |  |  |
|  | 10-20 | - | - | na | na |  |  |  |  |  |
|  | >20 | - | - | - | na |  |  |  |  |  |
|  |  |  | Yes | No | Don't know | No answer |  |  |  |  |  |
|  | **Live and work for more than 6 mths/yr in this village** | Yes | na | na | na | na |  |  |  |  |  |
|  | No | <0.0001 | na | na | na |  |  |  |  |  |
|  | Don't know | - | - | na | na |  |  |  |  |  |
|  | No answer | - | - | - | na |  |  |  |  |  |
|  |  |  | Yes | No | Don't know | No answer |  |  |  |  |  |
|  | **Have you had water contact last 12 mths** | Yes | na | na | na | na |  |  |  |  |  |
|  | No | 0.0099 | na | na | na |  |  |  |  |  |
|  | Don't know | - | - | na | na |  |  |  |  |  |
|  | No answer | - | - | - | na |  |  |  |  |  |
|  |  |  | >1 per wk | Between weekly and monthly | 1 per mth | No response |  |  |  |  |  |
| **Spring water contact activities** | **Frequency of water contact** | >1 per wk | na | na | na | na |  |  |  |  |  |
| Between weekly and monthly | 0.9786 | na | na | na |  |  |  |  |  |
| 1 per mth | 0.5388 | 0.5184 | na | na |  |  |  |  |  |
| No response | - | - | - | na |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Fishing** | Checked | 0.8600 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Herding bovines** | Checked | 0.3729 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Farming/Cutting grass** | Checked | 0.0073 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **washing clothes** | Checked | 0.4140 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Swimming or playing** | Checked | 0.2974 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Wading/Washing hands** | Checked | 0.9909 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Other** | Checked | <0.0001 |  |  |  |  |  |  |  |  |
| **Summer water contact activities** |  |  | >1 per wk | Between weekly and monthly | 1 per mth | No response |  |  |  |  |  |
| **Frequency of water contact** | >1 per wk | na | na | na | na |  |  |  |  |  |
| Between weekly and monthly | 0.1255 | na | na | na |  |  |  |  |  |
| 1 per mth | 0.3995 | 0.1835 | na | na |  |  |  |  |  |
| No response | - | - | - | na |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Fishing** | Checked | 0.0710 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Herding bovines** | Checked | 0.3729 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Farming/Cutting grass** | Checked | 0.1868 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **washing clothes** | Checked | 0.7356 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Swimming or playing** | Checked | 0.0047 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Wading/Washing hands** | Checked | 0.2959 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Other** | Checked | 0.0660 |  |  |  |  |  |  |  |  |
| **Autumn water contact activities** |  |  | >1 per wk | Between weekly and monthly | 1 per mth | No response |  |  |  |  |  |
| **Frequency of water contact** | >1 per wk | na | na | na | na |  |  |  |  |  |
| Between weekly and monthly | 0.7737 | na | na | na |  |  |  |  |  |
| 1 per mth | 0.3088 | 0.4475 | na | na |  |  |  |  |  |
| No response | - | - | - | na |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Fishing** | Checked | <0.0001 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Herding bovines** | Checked | 0.3046 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Farming/Cutting grass** | Checked | 0.0328 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **washing clothes** | Checked | - |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Swimming or playing** | Checked | - |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Wading/Washing hands** | Checked | 0.7453 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Other** | Checked | - |  |  |  |  |  |  |  |  |
| **Water contact - seasons combined** |  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Fishing** | Checked | 0.2855 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Herding bovines** | Checked | 0.4593 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Farming/Cutting grass** | Checked | 0.1782 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **washing clothes** | Checked | 0.8281 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Swimming or playing** | Checked | 0.0080 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Wading/Washing hands** | Checked | 0.5392 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Other** | Checked | 0.2745 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Any WC** | Checked | 0.2938 |  |  |  |  |  |  |  |  |