**Annexure 4: PSM procedure**

**Table 2. The Sample balances before PSM and after PSM**

|  |  |  |  |
| --- | --- | --- | --- |
| **Covariates** | **Unmatched** | **χ2** | **P value** |
| **Matched** |
| Gender | U | 125.934 | <0.001 |
| M | 0.016 | 0.900 |
| Age | U | 91.324 | <0.001 |
| M | 8.517 | 0.074 |
| Marital status | U | 919.249 | <0.001 |
| M | 9.471 | >0.05 |
| Educational level | U | 987.778 | <0.001 |
| M | 4.301 | 0.367 |
| Occupation | U | 326.655 | <0.001 |
| M | 7.743 | 0.459 |
| Perception of the NPV mutation | U | 848.642 | <0.001 |
| M | 1.449 | 0.485 |
| Perception of the effectiveness of COVID-19 vaccine | U | 2621.518 | <0.001 |
| M | 0.714 | 0.982 |
| Perception of the protection period of COVID-19 vaccine | U | 510.325 | <0.001 |
| M | 2.761 | 0.737 |

PSM procedures:

1)grouping: The unvaccinated participant group was set as “control group”, n=3172 (10.6%); the vaccinated participant group was set as “intervention group”, n=26753(89.4%)

2) matching method: 1:1 matching.

3) confounders: Gender, Age, Marital status, Educational level, Occupation, Perception of the NPV mutation, Perception of the effectiveness of COVID-19 vaccine, Perception of the protection period of COVID-19 vaccine.

4) outcome: 2041 pairs of participants captured (n=4082).