

Table 2. Association of education background and perceptions about COVID-19 vaccine

Questions	Primary	Secondary	Graduate	Postgraduate	Illiterate	Total	χ^2	P
<i>Part-II: Vaccine availability</i>								
Do you think there is a vaccine for COVID-19?	Yes 43(8.5%) No 22(8.21%)	Yes 71(14.03%) No 53(19.78%)	Yes 274(54.15%) No 140(52.24%)	Yes 74(14.62%) No 25(9.33%)	Yes 44(8.7%) No 28(10.45%)	Yes 506(100%) No 268(100%)	8.16	0.086
Do you know about the availability of COVID19 vaccine in Pakistan?	Yes 24(8.86%) No 41(8.15%)	Yes 44(16.254%) No 80(15.9%)	Yes 156(57.56%) No 258(51.29%)	Yes 34(12.55%) No 65(12.92%)	Yes 13(4.8%) No 59(11.73%)	Yes 271(100%) No 503(100%)	10.53	0.032
<i>Part-III: Vaccine conspiracies and myths</i>								
Do you think that COVID-19 vaccine is prepared for the purpose of making Muslims infertile?	Yes 40(18.87%) No 25(4.45%)	Yes 36(16.98%) No 88(15.66%)	Yes 80(37.74%) No 334(59.43%)	Yes 11(5.19%) No 88(15.66%)	Yes 45(21.23%) No 27(4.8%)	Yes 212(100%) No 562(100%)	109.6	0.000
Do you think that the COVID-19 vaccine is prepared only for making money?	Yes 61(16.18%) No 4(1.01%)	Yes 62(16.45%) No 62(15.62%)	Yes 153(40.58%) No 261(65.74%)	Yes 34(9.02%) No 65(16.37%)	Yes 67(17.77%) No 5(1.26%)	Yes 377(100%) No 397(100%)	140.8	0.000
Do you think that COVID-19 vaccine is a drama/propaganda?	Yes 55(16.72%) No 10(2.25%)	Yes 50(15.2%) No 749(16.63%)	Yes 133(40.43%) No 281(63.15%)	Yes 21(6.38%) No 78(17.53%)	Yes 70(21.28%) 2(0.45%)	Yes 329(100%) 445(100%)	172.2	0.000
Does the COVID-19 vaccine contain Haram ingredients?	Yes 56(16.28%) No 9(2.09%)	Yes 52(15.12%) No 9(2.09%)	Yes 136(39.53%) No 278(64.65%)	Yes 34(9.88%) No 65(15.12%)	Yes 66(19.19%) No 6(1.4%)	Yes 344(100%) No 430(100%)	137.7	0.000
Do you think that Covid-19 is an anti-Islamic agenda?	Yes 47(19.34%) No 18(3.39%)	Yes 38(15.64%) No 86(16.2%)	Yes 89(36.63%) No 325(61.21%)	Yes 16(6.58%) No 83(15.63%)	Yes 53(21.81%) No 19(3.58%)	Yes 243(100%) No 531(100%)	139.6	0.000
Do you think that the COVID-19 vaccines	Yes 41(14.09%) No 24(4.97%)	Yes 51(17.53%) No 73(15.11%)	Yes 131(45.02%) No 283(58.59%)	Yes 31(10.65%) No 68(14.08%)	Yes 37(12.71%) No 35(7.25%)	Yes 291(100%) No 483(100%)	32.40	0.000

will alter your DNA?								
<i>Part-IV: Vaccine safety and potency</i>								
What would you say about the COVID-19 vaccine? (Safe for Yes, Not safe for No)	Yes 12(3.87%) No 53(11.42%)	Yes 50(16.13%) No 74(15.95%)	Yes 189(60.97%) No 225(48.49%)	Yes 53(17.1%) No 46(9.91%)	Yes 6(1.94%) No 66(14.22%)	Yes 310(100%) No 464(100%)	55.69	0.000
Do you think that the Covid-19 vaccine will lead to many side effects on the human body?	Yes 39(8.44%) No 26(8.33%)	Yes 80(17.32%) No 44(14.1%)	Yes 239(51.73%) No 175(56.09%)	Yes 60(12.99%) No 39(12.5%)	Yes 44(9.52%) No 28(8.97%)	Yes 462(100%) No 312(100%)	1.95	0.743
Despite the less than 100% effectiveness/ efficacy of the COVID-19 vaccine, would you still prefer to be vaccinated?	Yes 24(5.9%) No 41(11.17%)	Yes 68(16.71%) No 56(15.16%)	Yes 231(56.76%) No 183(49.86%)	Yes 67(16.46%) No 32(8.72%)	Yes 17(4.18%) No 55(14.99%)	Yes 407(100%) No 367(100%)	41.64	0.000
Do you think that if you get a vaccine against covid-19 you will have a high chance of infected with covid-19 in future?	Yes 28(9.3%) No 37(7.82%)	Yes 69(22.92%) No 55(11.63%)	Yes 148(49.17%) No 266(56.24%)	Yes 34(11.3%) No 65(13.74%)	Yes 22(7.31%) No 50(10.57%)	Yes 301(100%) No 473(100%)	19.81	0.001
I have already infected with COVID-19 and cured so I don't need to get vaccinated	Yes 32(16.93%) No 33(3.85%)	Yes 33(17.46%) No 91(10.61%)	Yes 80(42.33%) No 334(38.93%)	Yes 23(12.17%) No 76(8.86%)	Yes 21(11.11%) No 51(5.94%)	Yes 189(100%) No 858(100%)	28.78	0.00
People with underlying conditions shouldn't get vaccinated.	Yes 24(6.17%) No 41(10.65%)	Yes 65(16.71%) No 59(15.32%)	Yes 219(56.3%) No 195(50.65%)	Yes 49(12.6%) No 50(12.99%)	Yes 32(8.23%) No 40(10.39%)	Yes 389(100%) No 385(100%)	7.006	0.136

Do you believe that the COVID-19 vaccines will provide long-term protection?	Yes 33(7.71%) No 32(9.25%)	Yes 63(14.72%) No 61(17.63%)	Yes 253(59.11%) No 161(46.53%)	Yes 55(12.85%) No 44(12.72%)	Yes 24(5.61%) No 48(13.87%)	Yes 428(100%) No 346(100%)	21.26	0.000
People with suppressed immune systems shouldn't get vaccinated Options True/False (Yes/NO)	Yes 28(7.8%) No 37(8.92%)	Yes 59(16.43%) No 65(15.66%)	Yes 205(57.1%) No 209(50.36%)	Yes 47(13.09%) No 52(12.53%)	Yes 20(5.57%) No 52(12.53%)	Yes 359(100%) No 415(100%)	12.0	0.017
Do you think that Pregnant or breastfeeding women should not get vaccinated because it will cause negative side effects on the fetus/newborn?	Yes 35(7.56%) No 30(9.65%)	Yes 80(17.28%) No 44(14.15%)	Yes 260(56.16%) No 154(49.52%)	Yes 63(13.61%) No 36(11.58%)	Yes 25(5.4%) No 47(15.11%)	Yes 463(100%) No 311(100%)	23.10	0.000
What would you say about the vaccine on behalf of the immunity of Pakistani people?	Yes 17(3.97%) No 48(13.87%)	Yes 74(17.29%) No 50(14.45%)	Yes 261(60.98%) No 153(44.22%)	Yes 68(15.89%) No 31(8.96%)	Yes 8(1.87%) No 64(18.5%)	Yes 428(100%) No 346(100%)	97.39	0.000
Once I get vaccinated, I don't have to wear masks or practice social distancing	Yes 35(14.46%) No 30(5.64%)	Yes 44(18.18%) No 80(15.04%)	Yes 106(43.8%) No 308(57.89%)	Yes 18(7.44%) No 81(15.23%)	Yes 39(16.12%) No 33(6.2%)	Yes 242(100%) No 532(100%)	48.08	0.000
Do you believe that the COVID-19 vaccine would be stable/safe in Pakistan? In terms of temperature, weather, and transportation?	Yes 25(5.75%) No 40(11.8%)	Yes 76(17.47%) No 48(14.16%)	Yes 256(58.85%) No 158(46.61%)	Yes 62(14.25%) No 37(10.91%)	Yes 16(3.68%) No 56(16.52%)	Yes 435(100%) No 339(100%)	50.38	0.000