

Investigation on Cognition of COVID-19 and Safety during the Pandemic among Hospital Pharmacy Staff

Yan He ^{a,†,*}, Wei Li ^{a,†} and Dong Liu ^{a,*}

^aTongji Hospital Affiliated to Tongji Medical College, Huazhong University of Science and Technology, Wuhan 430030, China

Supporting Information

Table S1. Investigation of hospital pharmacy staff's cognition of SARS-CoV-2

| | Characteristics | Infection Symptoms | Infectious Route | Prevention Methods |
|----------------------------------|-----------------|--------------------|------------------|--------------------|
| Gender | | | | |
| Male (n=141) | 124 (87.95) | 133 (94.33) | 126 (96.45) | 123 (87.23) |
| Female (n=385) | 325 (84.41) | 361 (93.76) | 365 (94.80) | 341 (88.58) |
| χ^2 | 1.028 | 0.057 | 4.924 | 0.178 |
| <i>p</i> value | 0.382 | 0.812 | 0.056 | 0.674 |
| Position | | | | |
| Drug dispensing (n=180) | 150 (83.33) | 167 (92.78) | 169 (93.89) | 158 (87.78) |
| Clinical pharmacist (n=150) | 130 (86.67) | 142 (94.67) | 143 (95.33) | 142 (94.67) |
| Management (n=58) | 45 (77.57) | 56 (96.55) | 57 (98.27) | 51 (87.93) |
| TDM (n=39) | 32 (82.05) | 35 (89.74) | 36 (92.31) | 35 (89.74) |
| Others (n=99) | 80 (80.81) | 89 (89.90) | 92 (92.93) | 82 (82.82) |
| χ^2 | 1.158 | 3.850 | 2.740 | 9.099 |
| <i>p</i> value | 0.885 | 0.427 | 0.608 | 0.057 |
| Educational background | | | | |
| Junior college or below (n=24) | 14 (58.33) | 15 (62.50) | 15 (62.50) | 16 (66.67) |
| Bachelor's degree (n=336) | 289 (86.01) | 317 (94.34) | 324 (96.42) | 299 (81.69) |
| Master's degree or above (n=166) | 143 (86.14) | 156 (93.97) | 157 (94.58) | 144 (86.75) |
| χ^2 | 13.626 | 34.348 | 47.890 | 10.080 |
| <i>p</i> value | 0.002 | <0.001 | <0.001 | 0.007 |

Table S2. Investigation of hospital pharmacists' cognition of COVID-19 treatment and prevention drugs (n=526)

| Content | Highly unfamiliar | Partly unfamiliar | Familiar | Partly familiar | Highly familiar |
|-------------------------------|--------------------------|--------------------------|-----------------|------------------------|------------------------|
| Thymosin | 0.57% | 11.9% | 19.2% | 43.16% | 35.17% |
| Immune globulin | 0 | 0.38% | 18.06% | 44.49% | 37.07% |
| Lopinavir/ritonavir | 1.14% | 8.08% | 32.61% | 37.07% | 21.10% |
| Arbidol | 0.76% | 9.13% | 29.09% | 40.3% | 20.72% |
| Redesivir | 3.42% | 10.02% | 30.48% | 33.53% | 22.55% |
| Interferon | 1.14% | 2.47% | 19.01% | 46.01% | 31.37% |
| Ribavirin | 0.19% | 0.76% | 13.12% | 45.63% | 40.3% |
| Lianhua ingwen capsule | 0.19% | 3.04% | 16.54% | 41.83% | 38.4% |

Table S3. Investigation on cognition of therapeutic and preventive drugs for COVID-19 [n(%)]

| | Thymosin | Immune globulin | Lopinavir/ritonavir | Arbidol | Interferon | Ribavirin | Lianhua ingwen capsule | Redesivir |
|----------------------------------|-------------|-----------------|---------------------|-------------|-------------|-------------|------------------------|-------------|
| Gender | | | | | | | | |
| Male (n=141) | 110 (78.01) | 110 (85.11) | 70 (49.64) | 89 (63.12) | 110 (85.11) | 122 (86.52) | 112 (79.43) | 87 (61.70) |
| Female (n=385) | 302 (78.44) | 309 (80.26) | 206 (53.51) | 232 (60.26) | 297 (77.14) | 330 (85.71) | 310 (80.52) | 225 (58.44) |
| χ^2 | 0.011 | 0.321 | 0.617 | 0.355 | 0.045 | 0.056 | 0.077 | 1.853 |
| <i>p</i> value | 0.916 | 0.571 | 0.432 | 0.551 | 0.832 | 0.813 | 0.781 | 0.061 |
| Position | | | | | | | | |
| Drug dispensing (n=180) | 140 (77.78) | 145 (80.56) | 98 (54.44) | 116 (64.44) | 137 (76.23) | 154 (85.56) | 139 (77.22) | 92 (51.11) |
| Clinical pharmacist (n=150) | 117 (78.00) | 120 (80.00) | 106 (70.67) | 108 (72.00) | 111 (74.00) | 128 (85.34) | 127 (84.67) | 104 (69.33) |
| Management (n=58) | 45 (78.59) | 46 (79.31) | 32 (55.17) | 37 (63.79) | 44 (75.86) | 49 (84.48) | 45 (77.58) | 29 (50.00) |
| TDM (n=39) | 30 (76.92) | 29 (74.36) | 21 (53.84) | 21 (53.84) | 31 (79.49) | 33 (84.62) | 32 (82.05) | 17 (43.59) |
| Others (n=99) | 72 (72.73) | 73 (73.74) | 49 (49.49) | 46 (46.47) | 70 (70.70) | 81 (81.82) | 78 (79.80) | 53 (53.54) |
| χ^2 | 1.158 | 2.397 | 14.203 | 18.149 | 1.576 | 0.775 | 3.312 | 16.027 |
| <i>p</i> value | 0.885 | 0.667 | 0.006 | 0.001 | 0.815 | 0.943 | 0.508 | 0.003 |
| Educational background | | | | | | | | |
| Junior college or below (n=24) | 17 (70.83) | 17 (70.83) | 10 (41.67) | 12 (50.00) | 15 (62.50) | 18 (75.00) | 18 (75.00) | 14 (58.33) |
| Bachelor's degree (n=336) | 267 (79.46) | 276 (82.14) | 178 (52.98) | 198 (58.93) | 262 (77.98) | 284 (85.52) | 260 (77.38) | 183 (54.46) |
| Master's degree or above (n=166) | 128 (77.11) | 136 (81.93) | 88 (53.01) | 111 (66.87) | 130 (78.31) | 140 (84.34) | 125 (75.30) | 89 (53.61) |
| χ^2 | 1.193 | 1.923 | 1.175 | 4.222 | 3.180 | 1.528 | 0.304 | 0.191 |
| <i>p</i> value | 0.551 | 0.382 | 0.556 | 0.121 | 0.204 | 0.466 | 0.859 | 0.909 |

Table S4. Safety and prophylaxis medications during the COVID-19 pandemic among hospital pharmacists [n(%)]

| | Content | Front-line pharmacists (n=168) | Non-front-line pharmacists (n=358) | χ^2 | <i>P</i> value |
|--------------------------------|---|---------------------------------------|---|----------|-----------------------|
| Safety | No infection | 156 (90.48) | 340 (94.97) | 2.713 | 0.100 |
| | Isolation investigation | 8 (4.76) | 13 (3.63) | 0.154 | 0.694 |
| | Suspected SARS-CoV-2 infection | 8 (4.76) | 2 (0.56) | 10.832 | 0.003 |
| | Confirmed COVID-19 | 0 (0) | 10 (2.79) | 4.784 | 0.035 |
| | Unused | 70 (41.67) | 264 (73.74) | 40.991 | <0.001 |
| Prophylaxis medications | Traditional Chinese medicine | 22 (13.09) | 56 (15.64) | 0.012 | 0.913 |
| | Arbidol | 70 (41.67) | 35 (9.78) | 59.682 | <0.001 |
| | immune enhancement drugs such as thymoseptide | 6 (3.57) | 3 (0.84) | 5.238 | 0.022 |

Front-line pharmacists: A febrile outpatient pharmacy, clinical pharmacist, TDM staff, or drug counseling outpatient pharmacist exposed to patients or specimens with suspected or confirmed SARS-CoV-2 infection.