Supplementary Table: All Participants' Responses *

| Section 2: Knowledge <br> 2.1. Knowledge of the Transgender Identity |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \# | Statement | $\begin{gathered} \text { Overall }(\mathrm{N}=249) \\ \mathrm{n}(\%) \\ \hline \end{gathered}$ | $\begin{gathered} \text { Pre-Clinical ( } \mathrm{N}=113 \text { ) } \\ \mathrm{n}(\%) \\ \hline \end{gathered}$ | $\begin{gathered} \text { Clinical }(\mathrm{N}=136) \\ \mathrm{n}(\%) \end{gathered}$ | $p$-value |
| 1 | Gender identity is always the same as sex assigned at birth. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 146(58.6) \\ 67(26.9) \\ \hline \end{gathered}$ | $\begin{aligned} & 62(54.9) \\ & 38(33.6) \\ & \hline \end{aligned}$ | $\begin{aligned} & 84 \text { (61.8) } \\ & 29(21.3) \\ & \hline \end{aligned}$ | 0.073 |
| 2 | Gender identity is synonymous with sexual orientation. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 139(55.8) \\ 55(22.1) \\ \hline \end{gathered}$ | $\begin{aligned} & 56(49.6) \\ & 33(29.2) \\ & \hline \end{aligned}$ | $\begin{aligned} & 83 \text { (61.0) } \\ & 22(16.2) \\ & \hline \end{aligned}$ | 0.044 |
| 3 | The transgender identity is an inherited condition. Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 111(44.6) \\ 71(28.5) \\ \hline \end{gathered}$ | $\begin{aligned} & 53(46.9) \\ & 36(31.9) \\ & \hline \end{aligned}$ | $\begin{aligned} & 58(42.6) \\ & 35(25.7) \\ & \hline \end{aligned}$ | 0.171 |
| 4 | The transgender identity is a contagious condition. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 224 \text { (90.0) } \\ 10(4.0) \\ \hline \end{gathered}$ | $\begin{gathered} 102 \text { (90.3) } \\ 4(3.5) \\ \hline \end{gathered}$ | $\begin{gathered} 122(89.7) \\ 6(4.4) \\ \hline \end{gathered}$ | 0.938 |
| 5 | The transgender identity is a modern concept due to the influence of media. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 175 \text { (70.3) } \\ 23(9.2) \\ \hline \end{gathered}$ | $\begin{aligned} & 80(70.8) \\ & 14(12.4) \end{aligned}$ | $\begin{gathered} 95 \text { (69.9) } \\ 9(6.6) \\ \hline \end{gathered}$ | 0.166 |
| 6 | The transgender identity is always a choice. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 123(49.4) \\ 63(25.3) \\ \hline \end{gathered}$ | $\begin{aligned} & 61(54.0) \\ & 28(24.8) \\ & \hline \end{aligned}$ | $\begin{aligned} & 62(45.6) \\ & 35(25.7) \\ & \hline \end{aligned}$ | 0.324 |
| 7 | The transgender identity is a disease. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 206 \text { (82.7) } \\ 17 \text { (6.8) } \\ \hline \end{gathered}$ | $\begin{gathered} 98 \text { (86.7) } \\ 6(5.3) \\ \hline \end{gathered}$ | $\begin{gathered} 108 \text { (79.4) } \\ 11(8.1) \\ \hline \end{gathered}$ | 0.315 |
| 8 | The transgender identity is a mental illness. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 200 \text { (80.3) } \\ 15 \text { (6.0) } \\ \hline \end{gathered}$ | $\begin{gathered} 95 \text { (84.1) } \\ 5(4.4) \\ \hline \end{gathered}$ | $\begin{gathered} 105 \text { (77.2) } \\ 10(7.4) \\ \hline \end{gathered}$ | 0.379 |
| 9 | The term "transgender" is synonymous with "intersex". <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 116 \text { (46.6) } \\ 15(6.0) \\ \hline \end{gathered}$ | $\begin{gathered} 52 \text { (46.0) } \\ 7(6.2) \\ \hline \end{gathered}$ | $\begin{gathered} 64(47.1) \\ 8(5.9) \\ \hline \end{gathered}$ | 0.984 |
| 10 | The term "transgender" is synonymous with "transvestite". <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 95(38.2) \\ 17(6.8) \\ \hline \end{gathered}$ | $\begin{gathered} 28(24.8) \\ 11(9.7) \\ \hline \end{gathered}$ | $\begin{gathered} 67 \text { (49.3) } \\ 6(4.4) \\ \hline \end{gathered}$ | $<0.001$ |
| 2.2. Knowledge of Differences in Health Needs |  |  |  |  |  |
| 1 | Individuals who identify as transgender always have physical deformities. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 157(63.1) \\ 36(14.5) \\ \hline \end{gathered}$ | $\begin{aligned} & 69 \text { (61.1) } \\ & 19(16.8) \\ & \hline \end{aligned}$ | $\begin{aligned} & 88(64.7) \\ & 17(12.5) \\ & \hline \end{aligned}$ | 0.626 |
| 2 | Patients who identify as transgender may have unique health risks and needs. |  |  |  |  |


|  | Strongly Disagree/Disagree Strongly Agree/Agree | $\begin{gathered} 51(20.5) \\ 132(53.0) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 27(23.9) \\ & 52(46.0) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 24(17.6) \\ & 80(58.8) \\ & \hline \end{aligned}$ | 0.130 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Individuals who identify as transgender are naturally sterile and cannot reproduce. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{aligned} & 73 \text { (29.3) } \\ & 76(30.5) \\ & \hline \end{aligned}$ | $\begin{aligned} & 29(25.7) \\ & 43(38.1) \\ & \hline \end{aligned}$ | $\begin{aligned} & 44 \text { (32.4) } \\ & 33(24.3) \\ & \hline \end{aligned}$ | 0.062 |
| 4 | Individuals who identify as transgender have a higher incidence of substance abuse than the general population. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{aligned} & 48 \text { (19.3) } \\ & 77(30.9) \\ & \hline \end{aligned}$ | $\begin{aligned} & 21(18.6) \\ & 32(28.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 27(19.9) \\ & 45(33.1) \\ & \hline \end{aligned}$ | 0.620 |
| 5 | Individuals who identify as transgender have a higher incidence of sexually transmitted illnesses than the general population. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{aligned} & 39(15.7) \\ & 95(38.2) \\ & \hline \end{aligned}$ | $\begin{aligned} & 24 \text { (21.2) } \\ & 31(27.4) \\ & \hline \end{aligned}$ | $\begin{aligned} & 15(11.0) \\ & 64(47.1) \\ & \hline \end{aligned}$ | 0.003 |
| 6 | Individuals who identify as transgender are more likely to develop mental illnesses than the general population. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 36(14.5) \\ 129(51.8) \\ \hline \end{gathered}$ | $\begin{aligned} & 19 \text { (16.8) } \\ & 54(47.8) \end{aligned}$ | $\begin{aligned} & 17(12.5) \\ & 75(55.1) \end{aligned}$ | 0.447 |
| 7 | Individuals who identify as transgender have higher suicide rates than the general population. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 17(6.8) \\ 126(50.6) \\ \hline \end{gathered}$ | $\begin{aligned} & 13(11.5) \\ & 48(42.5) \\ & \hline \end{aligned}$ | $\begin{gathered} 4(2.9) \\ 78(57.4) \\ \hline \end{gathered}$ | 0.007 |
| 8 | Individuals who identify as transgender who receive hormonal therapy are more susceptible to certain conditions as a result Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 21 \text { (8.4) } \\ 82(32.9) \\ \hline \end{gathered}$ | $\begin{gathered} 11(9.7) \\ 25(22.1) \\ \hline \end{gathered}$ | $\begin{gathered} 10(7.4) \\ 57(41.9) \\ \hline \end{gathered}$ | 0.004 |
| 9 | There are sufficient physician treatment guidelines for patients who identify as transgender <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{aligned} & 129(51.8) \\ & 27(10.8) \\ & \hline \end{aligned}$ | $\begin{aligned} & 54 \text { (47.8) } \\ & 12(10.6) \\ & \hline \end{aligned}$ | $\begin{aligned} & 75(55.1) \\ & 15(11.0) \\ & \hline \end{aligned}$ | 0.438 |
| 10 | There has been sufficient medical research conducted on the health of individuals who identify as transgender. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 145 \text { (58.2) } \\ 19 \text { (7.6) } \\ \hline \end{gathered}$ | $\begin{aligned} & 60(53.1) \\ & 12(10.6) \\ & \hline \end{aligned}$ | $\begin{gathered} 85 \text { (62.5) } \\ 7(5.1) \\ \hline \end{gathered}$ | 0.162 |
| Section 3: Perceptions and Attitudes <br> 3.1. Societal Perceptions |  |  |  |  |  |
| 1 | Individuals who identify as transgender are well-integrated into society. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 229 \text { (92.0) } \\ 5(2.0) \\ \hline \end{gathered}$ | $\begin{gathered} 104 \text { (92.0) } \\ 3(2.7) \\ \hline \end{gathered}$ | $\begin{gathered} 125 \text { (91.9) } \\ 2(1.5) \\ \hline \end{gathered}$ | 0.738 |
| 2 | Individuals who identify as transgender currently have equal access to education. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 224 \text { (90.0) } \\ 8(3.2) \\ \hline \end{gathered}$ | $\begin{gathered} 104 \text { (92.0) } \\ 4(3.5) \\ \hline \end{gathered}$ | $\begin{gathered} 120(88.2) \\ 4(2.9) \\ \hline \end{gathered}$ | 0.383 |


| 3 | Individuals who identify as transgender currently have equal access to employment. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 227 \text { (91.2) } \\ 6(2.4) \\ \hline \end{gathered}$ | $\begin{gathered} 104 \text { (92.0) } \\ 5(4.4) \\ \hline \end{gathered}$ | $\begin{gathered} 123(90.4) \\ 1(0.7) \\ \hline \end{gathered}$ | 0.038 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | Individuals who identify as transgender currently have equal access to housing. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{array}{r} 206 \text { (82.7) } \\ 16(6.4) \\ \hline \end{array}$ | $\begin{gathered} 94 \text { (83.2) } \\ 7(6.2) \\ \hline \end{gathered}$ | $\begin{gathered} 112(82.4) \\ 9(6.6) \\ \hline \end{gathered}$ | 0.984 |
| 5 | Individuals who identify as transgender currently have equal access to healthcare. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{aligned} & 195(78.3) \\ & 26(10.4) \\ & \hline \end{aligned}$ | $\begin{gathered} 92(81.4) \\ 11(9.7) \\ \hline \end{gathered}$ | $\begin{aligned} & 103(75.7) \\ & 15(11.0) \end{aligned}$ | 0.494 |
| 6 | Individuals who identify as transgender currently have equal access to legal justice. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 204 \text { (81.9) } \\ 16 \text { (6.4) } \\ \hline \end{gathered}$ | $\begin{gathered} 95 \text { (84.1) } \\ 7(6.2) \\ \hline \end{gathered}$ | $\begin{gathered} 109 \text { (80.1) } \\ 9(6.6) \\ \hline \end{gathered}$ | 0.676 |
| 7 | Individuals who identify as transgender are victims of societal harassment. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 18 \text { (7.2) } \\ 209 \text { (83.9) } \\ \hline \end{gathered}$ | $\begin{gathered} 7(6.2) \\ 95(84.1) \\ \hline \end{gathered}$ | $\begin{gathered} 11 \text { (8.1) } \\ 114 \text { (83.8) } \\ \hline \end{gathered}$ | 0.780 |
| 8 | Society is accepting of individuals who identify as transgender Strongly Disagree/Disagree Strongly Agree/Agree | $\begin{gathered} 228 \text { (91.6) } \\ 8(3.2) \\ \hline \end{gathered}$ | $\begin{gathered} 104 \text { (92.0) } \\ 4(3.5) \\ \hline \end{gathered}$ | $\begin{gathered} 124 \text { (91.2) } \\ 4(2.9) \\ \hline \end{gathered}$ | 0.850 |
| 9 | Individuals who identify as transgender frequently experience rejection by their own families. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 26(10.4) \\ 204 \text { (81.9) } \end{gathered}$ | $\begin{gathered} 9(8.0) \\ 94(83.2) \end{gathered}$ | $\begin{gathered} 17(12.5) \\ 110(80.9) \end{gathered}$ | 0.436 |
| 10 | Society feels that individuals who identify as transgender spread immorality and promiscuity. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 23(9.2) \\ 167(67.1) \\ \hline \end{gathered}$ | $\begin{gathered} 9(8.0) \\ 77(68.1) \\ \hline \end{gathered}$ | $\begin{aligned} & 14(10.3) \\ & 90(66.2) \end{aligned}$ | 0.818 |
| 11 | Society feels that individuals who identify as transgender should remain confined to their designated localities. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{array}{r} 31(12.4) \\ 173 \text { (69.5) } \end{array}$ | $\begin{aligned} & 14(12.4) \\ & 82(72.6) \\ & \hline \end{aligned}$ | $\begin{aligned} & 17 \text { (12.5) } \\ & 91 \text { (66.9) } \end{aligned}$ | 0.513 |
| 3.2. Personal Attitudes |  |  |  |  |  |
| 1 | I am comfortable around individuals who identify as transgender. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 4(1.6) \\ 20(8.0) \\ 110(44.2) \\ 53(21.3) \\ \hline \end{gathered}$ | $\begin{gathered} 0(0) \\ 7(6.2) \\ 45(39.8) \\ 32(28.3) \end{gathered}$ | $\begin{gathered} 4(2.9) \\ 13(9.6) \\ 65(47.8) \\ 21(15.4) \\ \hline \end{gathered}$ | 0.022 |
| 2 | I would feel comfortable working closely with an individual who identifies as transgender in my workplace. <br> Strongly Disagree | 3 (1.2) | 0 (0) | 3 (2.2) | 0.460 |


|  | Disagree <br> Agree Strongly Agree | $\begin{gathered} 13(5.2) \\ 115(46.2) \\ 66(26.5) \end{gathered}$ | $\begin{gathered} 5(4.4) \\ 50(44.2) \\ 32(28.3) \\ \hline \end{gathered}$ | $\begin{gathered} 8(5.9) \\ 65(47.8) \\ 34(25.0) \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | I believe I could be friends with an individual who identifies as transgender. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 2(0.8) \\ 10(4.0) \\ 117(47.0) \\ 72(28.9) \end{gathered}$ | $\begin{gathered} 0(0) \\ 8(7.1) \\ 50(44.2) \\ 32(28.3) \end{gathered}$ | $\begin{gathered} 2(1.5) \\ 2(1.5) \\ 67(49.3) \\ 40(29.4) \end{gathered}$ | 0.137 |
| 4 | As a doctor, I would be comfortable treating an individual who identifies as transgender. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 1(0.4) \\ 6(2.4) \\ 100(40.2) \\ 118(47.4) \end{gathered}$ | $\begin{gathered} 0(0) \\ 4(3.5) \\ 48(42.5) \\ 52(46.0) \\ \hline \end{gathered}$ | $\begin{gathered} 1(0.7) \\ 2(1.5) \\ 52(38.2) \\ 66(48.5) \end{gathered}$ | 0.577 |
| 5 | I would feel comfortable having an individual who identifies as transgender working in my home . <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 3(1.2) \\ 17(6.8) \\ 103(41.4) \\ 71(28.5) \\ \hline \end{gathered}$ | $\begin{gathered} 0(0) \\ 10(8.8) \\ 46(40.7) \\ 32(28.3) \\ \hline \end{gathered}$ | $\begin{gathered} 3(2.2) \\ 7(5.1) \\ 40(40.7) \\ 32(28.3) \\ \hline \end{gathered}$ | 0.440 |
| 6 | I would feel comfortable being served by an individual who identifies as transgender at a store or restaurant . <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 2(0.8) \\ 5(2.0) \\ 131(52.6) \\ 98(39.4) \\ \hline \end{gathered}$ | $\begin{gathered} 0(0) \\ 2(1.8) \\ 63(55.8) \\ 43(38.1) \\ \hline \end{gathered}$ | $\begin{gathered} 2(1.5) \\ 3(2.2) \\ 68(50.0) \\ 55(40.4) \\ \hline \end{gathered}$ | 0.654 |
| 7 | I would feel comfortable sharing a living space with an individual who identifies as transgender. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 4(1.6) \\ 33(13.3) \\ 80(32.1) \\ 53(21.3) \\ \hline \end{gathered}$ | $\begin{gathered} 1(0.9) \\ 22(19.5) \\ 33(29.2) \\ 27(23.9) \\ \hline \end{gathered}$ | $\begin{gathered} 3(2.2) \\ 11(8.1) \\ 47(34.6) \\ 26(19.1) \\ \hline \end{gathered}$ | 0.047 |
| 8 | I believe an individual who identifies as transgender should be treated with the same respect and dignity as any other person. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 3(1.2) \\ 2(0.8) \\ 68(27.3) \\ 169(67.9) \\ \hline \end{gathered}$ | $\begin{gathered} 1(0.9) \\ 0(0) \\ 33(29.2) \\ 77(68.1) \\ \hline \end{gathered}$ | $\begin{gathered} 2(1.5) \\ 2(1.5) \\ 35(25.7) \\ 92(67.6) \\ \hline \end{gathered}$ | 0.573 |
| 9 | I would intervene to help if I saw an individual who identifies as transgender being teased or mistreated. <br> Strongly Disagree <br> Disagree <br> Agree | $\begin{gathered} 4(1.6) \\ 1(0.4) \\ 126(50.6) \\ \hline \end{gathered}$ | $\begin{array}{r} 1(0.9) \\ 1(0.9) \\ 64(56.6) \\ \hline \end{array}$ | $\begin{gathered} 3(2.2) \\ 0(0) \\ 62(45.6) \\ \hline \end{gathered}$ | 0.262 |


|  | Strongly Agree | 85 (34.1) | 34 (30.1) | 51 (37.5) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | I would be upset if someone I'd known for a long time revealed that they used to identify as a different gender. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{aligned} & 33(13.3) \\ & 71(28.5) \\ & 50(20.1) \\ & 20(8.0) \\ & \hline \end{aligned}$ | $\begin{gathered} 11(9.7) \\ 28(24.8) \\ 25(22.1) \\ 11(9.7) \\ \hline \end{gathered}$ | $\begin{gathered} 22(16.2) \\ 43(31.6) \\ 25(18.4) \\ 9(6.6) \\ \hline \end{gathered}$ | 0.291 |
| 11 | I believe individuals who identify as transgender should have the opportunity to change their name. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 3(1.2) \\ 37(14.9) \\ 116(46.6) \\ 93(37.3) \end{gathered}$ | $\begin{gathered} 2(1.8) \\ 19(16.8) \\ 53(46.9) \\ 39(34.5) \end{gathered}$ | $\begin{gathered} 1(0.7) \\ 18(13.2) \\ 63(46.3) \\ 54(39.7) \\ \hline \end{gathered}$ | 0.675 |
| 12 | Individuals who identify as transgender should be facilitated if they want to medically/surgically transition . <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 5(2.0) \\ 5(2.0) \\ 104(41.8) \\ 91(36.5) \end{gathered}$ | $\begin{gathered} 3(2.7) \\ 3(2.7) \\ 44(38.9) \\ 41(36.3) \end{gathered}$ | $\begin{gathered} 2(1.5) \\ 2(1.5) \\ 60(44.1) \\ 50(36.8) \end{gathered}$ | 0.801 |
| 13 | Individuals who identify as transgender should be allowed to raise children. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 5(2.0) \\ 6(2.4) \\ 111(44.6) \\ 82(32.9) \\ \hline \end{gathered}$ | $\begin{gathered} 2(1.8) \\ 3(2.7) \\ 45(39.8) \\ 36(31.9) \\ \hline \end{gathered}$ | $\begin{gathered} 3(2.2) \\ 3(2.2) \\ 66(48.5) \\ 46(33.8) \\ \hline \end{gathered}$ | 0.276 |
| 14 | Individuals who identify as transgender should be forcefully sterilized. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 145(58.2) \\ 67(26.9) \\ 10(4.0) \\ 4(1.6) \\ \hline \end{gathered}$ | $\begin{gathered} 60(53.1) \\ 33(29.2) \\ 2(1.8) \\ 3(2.7) \\ \hline \end{gathered}$ | $\begin{gathered} 85(62.5) \\ 34(25.0) \\ 8(5.9) \\ 1(0.7) \\ \hline \end{gathered}$ | 0.054 |
| Section 4. Clinical Experiences |  |  |  |  |  |
| 1 | I feel individuals who identify as transgender are treated differently in a clinical setting. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 19 \text { (7.6) } \\ 146 \text { (58.6) } \end{gathered}$ | $\begin{gathered} 8(7.1) \\ 65(57.5) \\ \hline \end{gathered}$ | $\begin{gathered} 11(8.1) \\ 81(59.6) \end{gathered}$ | 0.863 |
| 2 | I feel that it would be difficult to discuss sexual health with patients who identify as transgender . <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{aligned} & 98 \text { (39.4) } \\ & 74 \text { (29.7) } \\ & \hline \end{aligned}$ | $\begin{aligned} & 52(46.0) \\ & 30(26.5) \\ & \hline \end{aligned}$ | $\begin{aligned} & 46(33.8) \\ & 44(32.4) \\ & \hline \end{aligned}$ | 0.146 |
| 3 | I would feel unsure of how to address patients who identify as transgender. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{gathered} 71(28.5) \\ 124(49.8) \\ \hline \end{gathered}$ | $\begin{aligned} & 41(36.3) \\ & 50(44.2) \\ & \hline \end{aligned}$ | $\begin{aligned} & 30(22.1) \\ & 75(54.4) \\ & \hline \end{aligned}$ | 0.046 |


| 4 | I would feel unsure of how to perform a clinical examination on a patient who identifies as transgender. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{aligned} & 86(34.5) \\ & 95(38.2) \\ & \hline \end{aligned}$ | $\begin{aligned} & 46(40.7) \\ & 39(34.5) \\ & \hline \end{aligned}$ | $\begin{aligned} & 40(29.4) \\ & 56(41.2) \\ & \hline \end{aligned}$ | 0.175 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | I would feel unsure of the need for a chaperone while examining a patient who identifies as transgender. <br> Strongly Disagree/Disagree <br> Strongly Agree/Agree | $\begin{aligned} & 80(32.1) \\ & 85(34.1) \end{aligned}$ | $\begin{array}{r} 41(36.3) \\ 33(29.2) \\ \hline \end{array}$ | $\begin{aligned} & 39(28.7) \\ & 52(38.2) \\ & \hline \end{aligned}$ | 0.269 |
| Section 6. Perceived Need for Trans-health within the Medical Curriculum |  |  |  |  |  |
| 1 | I need to be better educated about patients who identify as transgender to provide appropriate medical care for them. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 3(1.2) \\ 6(2.4) \\ 103(41.4) \\ 120(48.2) \\ \hline \end{gathered}$ | $\begin{gathered} 0(0) \\ 3(2.7) \\ 43(38.1) \\ 60(53.1) \\ \hline \end{gathered}$ | $\begin{gathered} 3(2.2) \\ 3(2.2) \\ 60(44.1) \\ 60(44.1) \\ \hline \end{gathered}$ | 0.374 |
| 2 | I feel that occurrence and prevalence of diseases in people who identify as transgender should be taught in addition to the occurrence and prevalence in cis males and cis females. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 3(1.2) \\ 10(4.0) \\ 123(49.4) \\ 91(36.5) \end{gathered}$ | $\begin{gathered} 1(0.9) \\ 4(3.5) \\ 52(46.0) \\ 44(38.9) \end{gathered}$ | $\begin{gathered} 2(1.5) \\ 6(4.4) \\ 71(52.2) \\ 47(34.6) \end{gathered}$ | 0.765 |
| 3 | I need to be taught how to take the medical history of a patient who identifies as transgender. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 3(1.2) \\ 15(6.0) \\ 109(43.8) \\ 103(41.4) \\ \hline \end{gathered}$ | $\begin{gathered} 0(0) \\ 6(5.3) \\ 48(42.5) \\ 52(46.0) \\ \hline \end{gathered}$ | $\begin{gathered} 3(2.2) \\ 9(6.6) \\ 61(44.9) \\ 51(37.5) \\ \hline \end{gathered}$ | 0.356 |
| 4 | I need to be taught how to perform a clinical examination on a patient who identifies as transgender. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 4(1.6) \\ 11(4.4) \\ 107(43.0) \\ 110(44.2) \\ \hline \end{gathered}$ | $\begin{gathered} 1(0.9) \\ 4(3.5) \\ 48(42.5) \\ 55(48.7) \\ \hline \end{gathered}$ | $\begin{gathered} 3(2.2) \\ 7(5.1) \\ 59(43.4) \\ 55(40.4) \\ \hline \end{gathered}$ | 0.427 |
| 5 | I need to be taught how to counsel patients who identify as transgender. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 2(0.8) \\ 8(3.2) \\ 11(44.6) \\ 113(45.4) \end{gathered}$ | $\begin{gathered} 0(0) \\ 4(3.5) \\ 45(39.8) \\ 58(51.3) \end{gathered}$ | $\begin{gathered} 2(1.5) \\ 4(2.9) \\ 66(48.5) \\ 55(40.4) \end{gathered}$ | 0.335 |
| 6 | I need to be taught how to counsel the families of patients who identify as transgender. <br> Strongly Disagree <br> Disagree | $\begin{aligned} & 2(0.8) \\ & 8(3.2) \end{aligned}$ | $\begin{gathered} 0(0) \\ 6(5.3) \end{gathered}$ | $\begin{aligned} & 2(1.5) \\ & 2(1.5) \end{aligned}$ | 0.289 |


|  | Agree Strongly Agree | $\begin{aligned} & \hline 104(41.8) \\ & 124(49.8 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 44(38.9) \\ & 58(51.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 60(44.1) \\ & 66(48.5) \\ & \hline \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | I need to be taught how to appropriately address patients who identify as transgender . <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 3(1.2) \\ 6(2.4) \\ 103(41.4) \\ 120(48.2) \\ \hline \end{gathered}$ | $\begin{gathered} 0(0) \\ 3(2.7) \\ 43(38.1) \\ 60(53.1) \\ \hline \end{gathered}$ | $\begin{gathered} 3(2.2) \\ 3(2.2) \\ 60(44.1) \\ 60(44.1) \\ \hline \end{gathered}$ | 0.374 |
| 8 | If not taught as part of the curriculum, I would specifically read up on medical trans-health issues and emergencies. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 5(2.0) \\ 25(10.0) \\ 98(38.6) \\ 61(24.5) \end{gathered}$ | $\begin{gathered} 0(0) \\ 8(7.1) \\ 46(40.7) \\ 33(29.2) \\ \hline \end{gathered}$ | $\begin{gathered} 5(3.7) \\ 17(12.5) \\ 50(36.8) \\ 28(20.6) \end{gathered}$ | 0.035 |
| 9 | Medical students should be taught the rights of people who identify as transgender in longitudinal sessions . <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 4(1.6) \\ 13(5.2) \\ 108(43.4) \\ 100(40.2) \\ \hline \end{gathered}$ | $\begin{gathered} 1(0.9) \\ 3(2.7) \\ 51(45.1) \\ 51(45.1) \\ \hline \end{gathered}$ | $\begin{gathered} 3(2.2) \\ 10(7.4) \\ 57(41.9) \\ 49(36.0) \\ \hline \end{gathered}$ | 0.109 |
| 10 | Education on trans-health will fill a gap in students' medical knowledge. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 2(0.8) \\ 8(3.2) \\ 120(48.2) \\ 95(38.2) \\ \hline \end{gathered}$ | $\begin{gathered} 0(0) \\ 1(0.9) \\ 56(49.6) \\ 48(42.5) \\ \hline \end{gathered}$ | $\begin{gathered} 2(1.5) \\ 7(5.1) \\ 64(47.1) \\ 47(34.6) \\ \hline \end{gathered}$ | 0.062 |
| 11 | Education on trans-health will improve patient care quality . <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 1(0.4) \\ 2(0.8) \\ 124(49.8) \\ 103(41.4) \end{gathered}$ | $\begin{gathered} 0(0) \\ 1(0.9) \\ 56(49.6) \\ 51(45.1) \\ \hline \end{gathered}$ | $\begin{gathered} 1(0.7) \\ 1(0.7) \\ 68(50.0) \\ 52(38.2) \end{gathered}$ | 0.301 |
| 12 | Learning about trans-health will make me a better doctor. <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 3(1.2) \\ 3(1.2) \\ 103(41.4) \\ 118(47.4) \\ \hline \end{gathered}$ | $\begin{gathered} 1(0.9) \\ 1(0.9) \\ 44(38.9) \\ 57(50.4) \\ \hline \end{gathered}$ | $\begin{gathered} 2(1.5) \\ 2(1.5) \\ 59(43.4) \\ 61(44.9) \\ \hline \end{gathered}$ | 0.902 |
| 13 | Incorporation of trans-health in the medical curriculum will encourage individuals who identify as transgender to seek medical help . <br> Strongly Disagree <br> Disagree <br> Agree <br> Strongly Agree | $\begin{gathered} 2(0.8) \\ 2(0.8) \\ 104(41.8) \\ 125(50.2) \\ \hline \end{gathered}$ | $\begin{gathered} 0(0) \\ 0(0) \\ 45(39.8) \\ 63(55.8) \\ \hline \end{gathered}$ | $\begin{gathered} 2(1.5) \\ 2(1.5) \\ 59(43.4) \\ 62(45.6) \\ \hline \end{gathered}$ | 0.106 |


| 14 | Learning and applying trans-health will improve the healthcare |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: |
|  | System of Pakistan. | $2(0.8)$ | $0(0)$ |  |
|  | Strongly Disagree | $2(0.8)$ | 0.061 |  |
|  | Disagree | $96(38.6)$ | $1(0.9)$ | $1(0.7)$ |
|  | Agree | $36(31.9)$ | $60(44.1)$ |  |
|  | Strongly Agree | $127(51.0)$ | $68(60.2)$ | $59(43.4)$ |

* $=$ (Responses marked Unsure are not included)


## Appendix

## Questionnaire

## Section 1: Demographics

1. Age:in years
2. Gender (select one) : 1. $\square$ Cis Male
3. $\square$ Cis Female
3.Transgender
4. . $\square$ Other (please specify) $\qquad$
5. Batch: Class of $20 \square \square$
6. Current residence: 1. AKU Hostel / 2. Elsewhere in Karachi
7. Previous City of Residence (prior to joining AKU): $\qquad$
8. Ethnicity (select one): 1. $\square$ Pashtun
9. $\square$ Punjabi
10. $\square$ Sindhi
11. 

$\square$ Balochi
5. $\square$ Muhajir
6.
$\square$ Mixed $\quad$ 7. $\square$ Other (please specify) $\qquad$

## Section 2: Knowledge

Written below are a series of statements. On a scale of 1 to 5 , rate the degree of your agreement with each statement.

| Strongly Disagree | Disagree | Unsure | Agree | Strongly Agree |
| :---: | :---: | :---: | :---: | :---: |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ |

### 2.1. Knowledge of the Transgender Identity

1) $\qquad$ Gender identity is always the same as sex assigned at birth.
2) $\qquad$ Gender identity is synonymous with sexual orientation.
3) $\qquad$ The transgender identity is an inherited condition.
4) $\qquad$ The transgender identity is a contagious condition.
$\qquad$ The transgender identity is a modern concept due to the influence of media.
5) $\qquad$ The transgender identity is always a choice.
6) $\qquad$ The transgender identity is a disease.
7) $\qquad$ The transgender identity is a mental illness.
8) $\qquad$ The term "transgender" is synonymous with "intersex".
9) $\qquad$ The term "transgender" is synonymous with "transvestite".

### 2.2. Knowledge of Differences in Health Needs

1. $\qquad$ Individuals who identify as transgender always have physical deformities.
2. $\qquad$ Patients who identify as transgender may have unique health risks and needs.
3. $\qquad$ Individuals who identify as transgender are naturally sterile and cannot reproduce.
4. $\qquad$ Individuals who identify as transgender have a higher incidence of substance abuse than the general population.
5. $\qquad$ Individuals who identify as transgender have a higher incidence of sexually transmitted illnesses than the general population.
6. $\qquad$ Individuals who identify as transgender are more likely to develop mental illnesses than the general population.
7. $\qquad$ Individuals who identify as transgender have higher suicide rates than the general population.
8. $\qquad$ Individuals who identify as transgender who receive hormonal therapy are more susceptible to certain conditions as a result.
9. $\qquad$ There are sufficient physician treatment guidelines for patients who identify as transgender.
10. $\qquad$ There has been sufficient medical research conducted on the health of individuals who identify as transgender.

## Section 3: Perceptions and Attitudes

Written below are a series of statements. On a scale of 1 to 5 , rate the degree of your agreement with each statement.

| Strongly Disagree | Disagree | Unsure | Agree | Strongly Agree |
| :---: | :---: | :---: | :---: | :---: |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ |

### 3.1. Societal Perceptions

1. $\qquad$ Individuals who identify as transgender are well integrated into society.
2. $\qquad$ Individuals who identify as transgender currently have equal access to education.
3. $\qquad$ Individuals who identify as transgender currently have equal access to employment.
4. $\qquad$ Individuals who identify as transgender currently have equal access to housing.
5. $\qquad$ Individuals who identify as transgender currently have equal access to healthcare.
6. $\qquad$ Individuals who identify as transgender currently have equal access to legal justice.
7. $\qquad$ Individuals who identify as transgender are victims of societal harassment.
8. $\qquad$ Society is accepting of individuals who identify as transgender
9. Individuals who identify as transgender frequently experience rejection by their own families.
10. $\qquad$ Society feels that individuals who identify as transgender spread immorality and promiscuity.
11. $\qquad$ Society feels that individuals who identify as transgender should remain confined to their designated localities.

### 3.2. Personal Attitudes

1. $\qquad$ I am comfortable around individuals who identify as transgender.
2. $\qquad$ I would feel comfortable working closely with an individual who identifies as transgender in my workplace.
3. $\qquad$ I believe I could be friends with an individual who identifies as transgender.
4. $\qquad$ As a doctor, I would be comfortable treating an individual who identifies as transgender.
5. $\qquad$ I would feel comfortable having an individual who identifies as transgender working in my home.
6. $\qquad$ I would feel comfortable being served by an individual who identifies as transgender at a store or restaurant.
7. $\qquad$ I would feel comfortable sharing a living space with an individual who identifies as transgender.
8. $\qquad$ I believe an individual who identifies as transgender should be treated with the same respect and dignity as any other person.
9. $\qquad$ I would intervene to help if I saw an individual who identifies as transgender being teased or mistreated.
10. $\qquad$ I would be upset if someone l'd known for a long time revealed that they used to identify as a different gender.
11. $\qquad$ I believe individuals who identify as transgender should have the opportunity to change their name.
12. $\qquad$ Individuals who identify as transgender should be facilitated if they want to medically/surgically transition.
13. $\qquad$ Individuals who identify as transgender should be allowed to raise children.
14. $\qquad$ Individuals who identify as transgender should be forcefully sterilized.

## Section 4: Clinical Experiences

Written below are a series of statements. On a scale of 1 to 5 , rate the degree of your agreement with each statement.

| Strongly Disagree | Disagree | Unsure | Agree | Strongly Agree |
| :---: | :---: | :---: | :---: | :---: |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ |

1. $\qquad$ I feel individuals who identify as transgender are treated differently in a clinical setting.
2. $\qquad$ I feel that it would be difficult to discuss sexual health with patients who identify as transgender.
$\qquad$ I would feel unsure of how to address patients who identify as transgender.
3. $\qquad$ I would feel unsure of how to perform a clinical examination on a patient who identifies as transgender.
4. $\qquad$ I would feel unsure of the need for a chaperone while examining a patient who identifies as transgender.

## Section 5: Personal Interactions

1. Have you ever interacted with someone who identifies as transgender? 1. Yes / 2. No (skip to question 5 if no)
2. How many friends do you have who identify as transgender? $\qquad$
3. As a medical student, have you ever interacted with an individual who identified as transgender, in a clinical setting? 1. Yes / 2. No
4. What is the closest relationship between you and an individual who identifies as transgender (select one):
5. $\square$ Self
6. $\square$ Sibling
7. पPatient
8. 

$\square$ Romantic partner
5. $\square$ Friend
6.
-Teacher
7. $\square$ Coworker
8. $\square$ Acquaintance
5. Mark all the sources where you have heard or seen trans-health-related information (select all that apply):
1.Friends
2.Family
3.Television/ Movies / Documentaries
4.News
5.Social Media
6.Books
7.Class / seminar / community event

## Section 6: Perceived Need for Trans-health within the Medical Curriculum

Written below are a series of statements. On a scale of 1 to 5 , rate the degree of your agreement with each statement.

| Strongly Disagree | Disagree | Unsure | Agree | Strongly Agree |
| :---: | :---: | :---: | :---: | :---: |
| $(1)$ | $(2)$ | $(3)$ | $(4)$ | $(5)$ |

1. $\qquad$ I need to be better educated about patients who identify as transgender to provide appropriate medical care for them.
2. $\qquad$ I feel that occurrence and prevalence of diseases in people who identify as transgender should be taught in addition to the occurrence and prevalence in cis males and cis females.
3. $\qquad$ I need to be taught how to take the medical history of a patient who identifies as transgender.
4. $\qquad$ I need to be taught how to perform a clinical examination on a patient who identifies as transgender.
$\qquad$ I need to be taught how to counsel patients who identify as transgender.
5. $\qquad$ I need to be taught how to counsel the families of patients who identify as transgender.
6. $\qquad$ I need to be taught how to appropriately address patients who identify as transgender.
7. $\qquad$ If not taught as part of the curriculum, I would specifically read up on medical trans-health issues and emergencies.
8. $\qquad$ Medical students should be taught the rights of people who identify as transgender in longitudinal sessions.
9. $\qquad$ Education on trans-health will fill a gap in students' medical knowledge.
10. ___Education on trans-health will improve patient care quality.
11. ___Learning about trans-health will make me a better doctor.
12. $\qquad$ Incorporation of trans-health in the medical curriculum will encourage individuals who identify as transgender to seek medical help.
13. $\qquad$ Learning and applying trans-health will improve the healthcare system of Pakistan.
