# TABLE 1. Socio - demographic characteristics of participants at baseline

| **Characteristics** | **Count SDB Baseline** | **Mean(CI)  SDB Baseline** | **p\_val** |
| --- | --- | --- | --- |
| Persistent sneezing |  |  | 0.1616 |
| No | 40 | 50.63(39.61-61.66) |  |
| Yes | 18 | 22.78(13.54-32.03) |  |
| C14-is on the go or often acts as if driven by a motor?. |  |  | 0.0188 |
| No | 18 | 22.78(13.54-32.03) |  |
| Yes | 40 | 50.63(39.61-61.66) |  |
| Child known to have allergic rhinitis? |  |  | 0.3303 |
| No | 45 | 56.96(46.04-67.88) |  |
| Yes | 13 | 16.46(8.28-24.63) |  |
| Child use antacids(Gaviscon) or proton pump inhibitors? |  |  | 0.6047 |
| No | 55 | 69.62(59.48-79.76) |  |
| Yes | 3 | 3.8(-0.42-8.01) |  |
| Have you witnessed an apnoea during sleep? |  |  | 0.289 |
| almost always | 5 | 6.33(0.96-11.7) |  |
| frequently | 6 | 7.59(1.75-13.44) |  |
| never | 38 | 48.1(37.08-59.12) |  |
| occassionaly | 1 | 1.27(-1.2-3.73) |  |
| rarely | 8 | 10.13(3.47-16.78) |  |
| Persistent itching or rubbing of the nose |  |  | 0.156 |
| No | 39 | 49.37(38.34-60.39) |  |
| Yes | 19 | 24.05(14.63-33.48) |  |
| A24- Tend to breathe through the mouth during the day? |  |  | 0.0193 |
| No | 25 | 31.65(21.39-41.9) |  |
| Yes | 33 | 41.77(30.9-52.65) |  |
| Allergic shiners |  |  | 1 |
| No | 47 | 59.49(48.67-70.32) |  |
| Yes | 3 | 3.8(-0.42-8.01) |  |
| Rhinorhoea and nasal obstruction lasting longer than two weeks. |  |  | 0.0084 |
| No | 30 | 37.97(27.27-48.68) |  |
| Yes | 28 | 35.44(24.9-45.99) |  |
| Child known to have asthma? |  |  | 0.6577 |
| No | 53 | 67.09(56.73-77.45) |  |
| Yes | 4 | 5.06(0.23-9.9) |  |
| Concerns about your child breathing while asleep? |  |  | 0.0025 |
| almost always | 31 | 39.24(28.47-50.01) |  |
| frequently | 8 | 10.13(3.47-16.78) |  |
| never | 10 | 12.66(5.33-19.99) |  |
| occassionaly | 5 | 6.33(0.96-11.7) |  |
| rarely | 4 | 5.06(0.23-9.9) |  |
| C5- has difficulty organizing task and activity? |  |  | 0.1604 |
| Dont know | 1 | 1.27(-1.2-3.73) |  |
| No | 41 | 51.9(40.88-62.92) |  |
| Yes | 16 | 20.25(11.39-29.12) |  |
| A25-tend to have a dry mouth on waking up in the morning? |  |  | 0 |
| Dont know | 2 | 2.53(-0.93-6) |  |
| No | 12 | 15.19(7.28-23.1) |  |
| Yes | 44 | 55.7(44.74-66.65) |  |
| C8- is easily distracted by extraneous stimuli? |  |  | 0.0179 |
| No | 22 | 27.85(17.96-37.73) |  |
| Yes | 36 | 45.57(34.59-56.55) |  |
| Employment |  |  | 0.6898 |
| Employed | 17 | 21.52(12.46-30.58) |  |
| Self employed | 24 | 30.38(20.24-40.52) |  |
| Unemployed | 17 | 21.52(12.46-30.58) |  |
| Child exposed to cigarette smoke ? |  |  | 1 |
| No | 50 | 63.29(52.66-73.92) |  |
| Yes | 4 | 5.06(0.23-9.9) |  |
| C10- fidgets with hands or feet or squirms in seat? |  |  | 0.1937 |
| Dont know | 1 | 1.27(-1.2-3.73) |  |
| No | 17 | 21.52(12.46-30.58) |  |
| Yes | 40 | 50.63(39.61-61.66) |  |
| Allergic dorsal nasal crease |  |  | 0.4622 |
| No | 49 | 62.03(51.32-72.73) |  |
| Yes | 1 | 1.27(-1.2-3.73) |  |
| 6. HARD TO WAKE CHILD UP ?B6 |  |  | 0.5625 |
| No | 41 | 51.9(40.88-62.92) |  |
| Yes | 17 | 21.52(12.46-30.58) |  |
| A5-Have heavy or loud breathing |  |  | 0.0002 |
| No | 22 | 27.85(17.96-37.73) |  |
| Yes | 36 | 45.57(34.59-56.55) |  |
| Insurance scheme |  |  | 0.5747 |
| Employer | 1 | 1.27(-1.2-3.73) |  |
| NHIF | 45 | 56.96(46.04-67.88) |  |
| None | 6 | 7.59(1.75-13.44) |  |
| Other | 5 | 6.33(0.96-11.7) |  |
| C18- interrupts or intrudes on others eg. butts into conversation |  |  | 0.1331 |
| No | 27 | 34.18(23.72-44.64) |  |
| Yes | 31 | 39.24(28.47-50.01) |  |
| C3-listen when spoken to directly? |  |  | 0.0125 |
| No | 32 | 40.51(29.68-51.33) |  |
| Yes | 25 | 31.65(21.39-41.9) |  |
| Ventolin syrup |  |  | 0.6361 |
| No | 53 | 67.09(56.73-77.45) |  |
| Yes | 4 | 5.06(0.23-9.9) |  |
| Salbutamol inhaler (eg Ventolin) |  |  | 1 |
| No | 55 | 69.62(59.48-79.76) |  |
| Yes | 2 | 2.53(-0.93-6) |  |
| Inhaled corticosteroid (eg budecort..) |  |  | 0.4685 |
| No | 56 | 70.89(60.87-80.9) |  |
| Yes | 1 | 1.27(-1.2-3.73) |  |
| Oral steroid (prednisolone) |  |  | 0.093 |
| No | 56 | 70.89(60.87-80.9) |  |
| Yes | 2 | 2.53(-0.93-6) |  |
| Nebulization |  |  | 1 |
| No | 48 | 60.76(49.99-71.53) |  |
| Yes | 9 | 11.39(4.39-18.4) |  |
| Antihistamine |  |  | 0.1979 |
| No | 22 | 27.85(17.96-37.73) |  |
| Yes | 36 | 45.57(34.59-56.55) |  |
| 9. CHILD OVERWEIGHT?B22 |  |  | 0.5619 |
| No | 53 | 67.09(56.73-77.45) |  |
| Yes | 3 | 3.8(-0.42-8.01) |  |
| A6- has trouble breathing or struggle to breathe |  |  | 0.0062 |
| No | 16 | 20.25(11.39-29.12) |  |
| Yes | 42 | 53.16(42.16-64.17) |  |
| Sex |  |  | 0.4503 |
| Female | 22 | 27.85(17.96-37.73) |  |
| Male | 36 | 45.57(34.59-56.55) |  |
| Shake your child to breathe? |  |  | 0.8666 |
| almost always | 3 | 3.8(-0.42-8.01) |  |
| frequently | 1 | 1.27(-1.2-3.73) |  |
| never | 46 | 58.23(47.35-69.1) |  |
| occassionaly | 5 | 6.33(0.96-11.7) |  |
| rarely | 3 | 3.8(-0.42-8.01) |  |
| B2- have a problem with sleepiness during the day? |  |  | 0.1334 |
| No | 42 | 53.16(42.16-64.17) |  |
| Yes | 16 | 20.25(11.39-29.12) |  |
| 5. APPEARS SLEEPY DURING THE DAY?B4 |  |  | 0.2131 |
| Dont know | 3 | 3.8(-0.42-8.01) |  |
| No | 44 | 55.7(44.74-66.65) |  |
| Yes | 11 | 13.92(6.29-21.56) |  |
| Smoking |  |  | 1 |
| No | 56 | 70.89(60.87-80.9) |  |
| Yes | 2 | 2.53(-0.93-6) |  |
| A3-always snore |  |  | 0.0151 |
| No | 18 | 22.78(13.54-32.03) |  |
| Yes | 40 | 50.63(39.61-61.66) |  |
| A4-snore badly |  |  | 0.0148 |
| Dont know | 1 | 1.27(-1.2-3.73) |  |
| No | 18 | 22.78(13.54-32.03) |  |
| Yes | 39 | 49.37(38.34-60.39) |  |
| A2-snore more than half the time |  |  | 0.0133 |
| No | 16 | 20.25(11.39-29.12) |  |
| Yes | 42 | 53.16(42.16-64.17) |  |
| Child snore while asleep? |  |  | 0.0006 |
| almost always | 42 | 53.16(42.16-64.17) |  |
| frequently | 7 | 8.86(2.59-15.13) |  |
| never | 3 | 3.8(-0.42-8.01) |  |
| occassionaly | 1 | 1.27(-1.2-3.73) |  |
| rarely | 5 | 6.33(0.96-11.7) |  |
| Chils used steroid nasal sprays or drops (last three months?) |  |  | 0.0695 |
| No | 10 | 12.66(5.33-19.99) |  |
| Yes | 48 | 60.76(49.99-71.53) |  |
| A7-SEEN YOUR CHILD STOP BREATHING DURING THE NIGHT? |  |  | 0.1353 |
| No | 39 | 49.37(38.34-60.39) |  |
| Yes | 19 | 24.05(14.63-33.48) |  |
| 8. STOPPED GROWING AT A NORMAL RATE AT ANY TIME SINCE BIRTH?B9. |  |  | 0.1211 |
| No | 31 | 39.24(28.47-50.01) |  |
| Yes | 26 | 32.91(22.55-43.27) |  |
| Child struggle breathing while asleep? |  |  | 0.0004 |
| almost always | 27 | 34.18(23.72-44.64) |  |
| frequently | 8 | 10.13(3.47-16.78) |  |
| never | 9 | 11.39(4.39-18.4) |  |
| occassionaly | 8 | 10.13(3.47-16.78) |  |
| rarely | 6 | 7.59(1.75-13.44) |  |
| Prominent inferior turbinates |  |  | 0.2071 |
| Left | 8 | 10.13(3.47-16.78) |  |
| N/A | 22 | 27.85(17.96-37.73) |  |
| Right | 21 | 26.58(16.84-36.32) |  |
| 7. WAKE UP WITH HEADACHES ?B7 |  |  | 0.0341 |
| Dont know | 2 | 2.53(-0.93-6) |  |
| No | 38 | 48.1(37.08-59.12) |  |
| Yes | 18 | 22.78(13.54-32.03) |  |
| B1- wake up feeling unrefreshed in the morning? |  |  | 0.0147 |
| Dont know | 3 | 3.8(-0.42-8.01) |  |
| No | 23 | 29.11(19.1-39.13) |  |
| Yes | 32 | 40.51(29.68-51.33) |  |
| A32- for children above 4yrs;occasionally wet the bed? |  |  | 0.6315 |
| Dont know | 17 | 21.52(12.46-30.58) |  |
| No | 18 | 22.78(13.54-32.03) |  |
| Yes | 17 | 21.52(12.46-30.58) |  |
| He/she had wheezing in the last 3 months? |  |  | 0.7684 |
| No | 43 | 54.43(43.45-65.41) |  |
| Yes | 13 | 16.46(8.28-24.63) |  |

# TABLE 2. Socio - demographic characteristics of participants post surgery

| **Characteristics** | **Count SDB endline** | **Mean(CI)  SDB endline** | **p\_val** |
| --- | --- | --- | --- |
| C14-is on the go or often acts as if driven by a motor?. |  |  | 0.0058 |
| No | 1 | 1.27(-1.2-3.73) |  |
| Yes | 13 | 16.46(8.28-24.63) |  |
| allergic\_rhinitis\_diag |  |  | 0.3935 |
| allergic\_rhinitis\_diag | 5 | 6.33(0.96-11.7) | 0.3935 |
| allergic\_rhinitis\_diag | 9 | 11.39(4.39-18.4) | 0.3935 |
| Have you witnessed an apnoea during sleep? |  |  |  |
| never | 14 | 17.72(9.3-26.14) |  |
| asthma\_diag |  |  | 1 |
| asthma\_diag | 9 | 11.39(4.39-18.4) | 1 |
| asthma\_diag | 5 | 6.33(0.96-11.7) | 1 |
| A24- Tend to breathe through the mouth during the day? |  |  | 0.003 |
| Dont know | 1 | 1.27(-1.2-3.73) |  |
| No | 8 | 10.13(3.47-16.78) |  |
| Yes | 5 | 6.33(0.96-11.7) |  |
| Concerns about your child breathing while asleep? |  |  | 0.0007 |
| almost always | 5 | 6.33(0.96-11.7) |  |
| frequently | 1 | 1.27(-1.2-3.73) |  |
| never | 3 | 3.8(-0.42-8.01) |  |
| occassionaly | 2 | 2.53(-0.93-6) |  |
| rarely | 2 | 2.53(-0.93-6) |  |
| C5- has difficulty organizing task and activity? |  |  | 0.1302 |
| Dont know | 1 | 1.27(-1.2-3.73) |  |
| No | 9 | 11.39(4.39-18.4) |  |
| Yes | 4 | 5.06(0.23-9.9) |  |
| C8- is easily distracted by extraneous stimuli? |  |  | 0.0055 |
| No | 4 | 5.06(0.23-9.9) |  |
| Yes | 10 | 12.66(5.33-19.99) |  |
| A25-tend to have a dry mouth on waking up in the morning? |  |  | 0 |
| No | 4 | 5.06(0.23-9.9) |  |
| Yes | 10 | 12.66(5.33-19.99) |  |
| C10- fidgets with hands or feet or squirms in seat? |  |  | 0.1406 |
| No | 4 | 5.06(0.23-9.9) |  |
| Yes | 10 | 12.66(5.33-19.99) |  |
| 6. HARD TO WAKE CHILD UP ?B6 |  |  | 0.0036 |
| No | 9 | 11.39(4.39-18.4) |  |
| Yes | 5 | 6.33(0.96-11.7) |  |
| 7. WAKE UP WITH HEADACHES ?B7 |  |  | 0.0652 |
| No | 11 | 13.92(6.29-21.56) |  |
| Yes | 3 | 3.8(-0.42-8.01) |  |
| C18- interrupts or intrudes on others eg. butts into conversation |  |  | 0.7768 |
| No | 6 | 7.59(1.75-13.44) |  |
| Yes | 8 | 10.13(3.47-16.78) |  |
| C3-listen when spoken to directly? |  |  | 1 |
| No | 9 | 11.39(4.39-18.4) |  |
| Yes | 5 | 6.33(0.96-11.7) |  |
| 8. STOPPED GROWING AT A NORMAL RATE AT ANY TIME SINCE BIRTH?B9. |  |  | 0.0373 |
| No | 7 | 8.86(2.59-15.13) |  |
| Yes | 7 | 8.86(2.59-15.13) |  |
| osa\_b\_binary |  |  | 0.7688 |
| osa\_b\_binary | 7 | 8.86(2.59-15.13) | 0.7688 |
| osa\_b\_binary | 7 | 8.86(2.59-15.13) | 0.7688 |
| osa\_binary |  |  | 0.7688 |
| osa\_binary | 7 | 8.86(2.59-15.13) | 0.7688 |
| osa\_binary | 7 | 8.86(2.59-15.13) | 0.7688 |
| 9. CHILD OVERWEIGHT?B22 |  |  | 1 |
| No | 14 | 17.72(9.3-26.14) |  |
| B2- have a problem with sleepiness during the day? |  |  | 0.0073 |
| No | 9 | 11.39(4.39-18.4) |  |
| Yes | 5 | 6.33(0.96-11.7) |  |
| Shake your child to breathe? |  |  |  |
| never | 14 | 17.72(9.3-26.14) |  |
| 5. APPEARS SLEEPY DURING THE DAY?B4 |  |  | 0.1558 |
| No | 11 | 13.92(6.29-21.56) |  |
| Yes | 1 | 1.27(-1.2-3.73) |  |
| A3-always snore |  |  | 0.0073 |
| No | 9 | 11.39(4.39-18.4) |  |
| Yes | 5 | 6.33(0.96-11.7) |  |
| A4-snore badly |  |  | 0.0046 |
| No | 11 | 13.92(6.29-21.56) |  |
| Yes | 3 | 3.8(-0.42-8.01) |  |
| A5-Have heavy or loud breathing |  |  | 0.0002 |
| No | 8 | 10.13(3.47-16.78) |  |
| Yes | 6 | 7.59(1.75-13.44) |  |
| A2-snore more than half the time |  |  | 0.0164 |
| No | 11 | 13.92(6.29-21.56) |  |
| Yes | 3 | 3.8(-0.42-8.01) |  |
| Child snore while asleep? |  |  | 0.0015 |
| almost always | 1 | 1.27(-1.2-3.73) |  |
| frequently | 3 | 3.8(-0.42-8.01) |  |
| never | 4 | 5.06(0.23-9.9) |  |
| occassionaly | 3 | 3.8(-0.42-8.01) |  |
| rarely | 3 | 3.8(-0.42-8.01) |  |
| A7-SEEN YOUR CHILD STOP BREATHING DURING THE NIGHT? |  |  | 0.0007 |
| No | 10 | 12.66(5.33-19.99) |  |
| Yes | 4 | 5.06(0.23-9.9) |  |
| Child struggle breathing while asleep? |  |  | 0.149 |
| almost always | 1 | 1.27(-1.2-3.73) |  |
| never | 12 | 15.19(7.28-23.1) |  |
| rarely | 1 | 1.27(-1.2-3.73) |  |
| A6- has trouble breathing or struggle to breathe |  |  | 0 |
| No | 6 | 7.59(1.75-13.44) |  |
| Yes | 8 | 10.13(3.47-16.78) |  |
| B1- wake up feeling unrefreshed in the morning? |  |  | 0 |
| No | 3 | 3.8(-0.42-8.01) |  |
| Yes | 11 | 13.92(6.29-21.56) |  |
| A32- for children above 4yrs;occasionally wet the bed? |  |  | 0.4657 |
| No | 3 | 3.8(-0.42-8.01) |  |
| Yes | 8 | 10.13(3.47-16.78) |  |