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Supplementary appendix

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Appendix

Supplementary Table A: Participant symptoms, co-morbidities & cancer knowledge

| | Study catchment area (state) | | | |
|--|------------------------------|----------------|----------------|---------------------|
| | Osun n=1150 | Lagos n=523 | Kwara n=657 | All sites n=2330 |
| History of blood in stool (>6mo ago) | 50 (4) | 72 (14) | 52 (8) | 174 (8) |
| Perceptions on cause of blood in stool | | | | |
| Peptic ulcer | 0/50 (0) | 2/72 (3) | 1/52 (2) | 3/174 (2) |
| Hemorrhoids/Piles | 18/50 (36) | 28/72 (39) | 18/52 (35) | 64/174 (37) |
| Dysentery | 4/50 (8) | 1/72 (1) | 2/52 (4) | 7/174 (4) |
| Worms | 1/50 (2) | 0/72 (0) | 0/52 (0) | 1/174 (1) |
| Malaria | 0/50 (0) | 0/72 (0) | 0/52 (0) | 0/174 (0) |
| Constipation | 3/50 (6) | 10/72 (14) | 13/52 (25) | 26/174 (15) |
| Eating sugar | 6/50 (12) | 8/72 (11) | 5/52 (10) | 19/174 (11) |
| Don't know | 7/50 (14) | 9/72 (13) | 7/52 (13) | 23/174 (13) |
| Other | 6/50 (12) | 14/72 (19) | 8/52 (15) | 28/174 (16) |
| Sought medical assistance for blood in stool | 19/50 (38) | 19/72 (26) | 16/52 (31) | 54/174 (31) |
| Diagnosis if medical assistance sought | | | | |
| Hemorrhoids/Piles | 10/19 (40) | 10/19 (53) | 6/16 (38) | 26/54 (48) |
| Dysentery | 1/19 (4) | 0/19 (0) | 0/16 (0) | 1/54 (2) |
| Infection/Parasite | 2/19 (8) | 0/19 (0) | 1/16 (6) | 3/53 (6) |
| Cancer | 0/19 (0) | 0/19 (0) | 0/16 (0) | 0/54 (0) |
| Don't know | 4/19 (16) | 5/19 (26) | 5/16 (31) | 14/54 (26) |
| Other | 2/19 (8) | 1/19 (5) | 4/16 (25) | 7/54 (13) |
| Change in bowel habit | 127 (11) | 61 (12) | 66 (10) | 253 (11) |
| Unexplained weight loss | 30 (3) | 21 (4) | 31 (5) | 82 (4) |
| Fatigue | 166 (14) | 49 (10) | 57 (9) | 272 (12) |
| Recent treatment for GI parasitic infection | 104 (9) | 43 (8) | 42 (6) | 189 (8) |
| History of anal fissure | 319 (28) | 163 (32) | 172 (26) | 654 (28) |
| Pre-menopausal (women only) | 76/664 (12) | 50 (17) | 67 (17) | 193 (14) |
| Smoking status | | | | |
| Current-smoker | 17 (2) | 7 (1) | 11 (2) | 35 (2) |
| Ex-smoker | 42 (4) | 16 (3) | 30 (5) | 88 (4) |
| Never smoker | 1091 (95) | 501 (96) | 615 (94) | 2207 (95) |
| Alcohol use | | | | |
| Current alcohol use | 123 (11) | 104 (20) | 38 (6) | 265 (11) |
| Previous alcohol use, none now | 104 (9) | 39 (7) | 49 (8) | 192 (8) |
| Never drinker | 923 (80) | 381 (73) | 569 (87) | 1873 (80) |
| Co-morbidities | | | | |
| Tuberculosis (TB) | 11 (1) | 8 (2) | 5 (1) | 24 (1) |
| Malaria | 563 (49) | 289 (55) | 311 (47) | 1163 (50) |
| HIV | 4 (0) | 3 (1) | 6 (1) | 13 (1) |
| HBV | 6 (1) | 7 (1) | 9 (1) | 22 (1) |
| HCV | 0 (0) | 0 (0) | 1 (0) | 1 (0) |
| COPD | 0 (0) | 2 (0) | 8 (1) | 10 (0) |
| Sickle cell disease | 3 (0) | 2 (0) | 3 (1) | 8 (0) |
| Peptic ulcer disease | 141 (12) | 83 (16) | 187 (29) | 411 (18) |
| Diabetes | 61 (5) | 31 (6) | 63 (10) | 155 (7) |
| Hypertension | 332 (29) | 154 (29) | 247 (38) | 733 (32) |
| Myocardial infarction | 3 (0) | 1 (0) | 8 (1) | 12 (1) |
| Hyperlipidemia | 13 (1) | 45 (9) | 9 (1) | 67 (3) |
| Stroke/TIA | 3 (0) | 2 (0) | 3 (0) | 8 (0.3) |
| Asthma | 11 (1) | 12 (2) | 15 (2) | 38 (1.6) |
| Epilepsy | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Colon cancer | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Other cancer | 1 (0) | 2 (0) | 6 (1) | 9 (0.4) |
| Medication use (past 7 days) | | | | |
| Acetaminophen | 389 (34) | 223 (43) | 335 (51) | 947 (41) |
| Aspirin (ASA) | 22 (2) | 35 (7) | 41 (6) | 98 (4) |
| NSAID | 171 (15) | 106 (20) | 114 (17) | 391 (17) |
| Blood thinner (not ASA) | 2 (0) | 35 (7) | 31 (5) | 68 (3) |
| Vitamin C | 98 (9) | 158 (30) | 115 (18) | 371 (16) |
| Other medication | 308 (27) | 209 (40) | 243 (37) | 760 (33) |
| Herbal/traditional medication use | 374 (33) | 240 (46) | 279 (42) | 893 (38) |
| Family History of Colorectal Cancer | | | | |
| Yes | 6 (1) | 3 (1) | 9 (1) | 18 (1) |
| Don't know | 19 (2) | 4 (1) | 15 (2) | 38 (2) |
| Family History of cancer | 53 (5) | 36 (7) | 42 (6) | 131 (6) |
| Yes | 53 (5) | 36 (7) | 42 (6) | 131 (6) |
| Don't know | 20 (2) | 12 (2) | 9 (1) | 41 (2) |
| Prior cancer screening (any type, both sexes) | 148 (13) | 188 (36) | 141 (22) | 477 (20) |
| Type of previous cancer screening | | | | |
| Breast (denominator: total women) | 61 (9) | 80 (26) | 63 (16) | 204 (15) |
| Cervical (denominator: total women) | 50 (8) | 64 (21) | 47 (12) | 161 (12) |
| Prostate (denominator: total men) | 24 (5) | 26 (12) | 25 (6) | 75 (8) |
| Other | 13 (1) | 17 (3) | 6 (1) | 36 (2) |
| Discussed CRC screening with health provider previously | 12 (1) | 8 (2) | 7 (1) | 27 (1) |
| Previously advised to get a colonoscopy/flexible sigmoidoscopy | 4 (0) | 8 (2) | 3 (1) | 15 (1) |
| Recognition/knowledge of symptoms associated with CRC | | | | |
| Rectal bleeding | 101 (9) | 90 (17) | 79 (12) | 270 (12) |
| Abdominal pain | 69 (6) | 101 (19) | 52 (8) | 222 (10) |
| Change in bowel habit (weeks-months) | 83 (7) | 91 (17) | 47 (7) | 221 (10) |
| Incomplete evacuation bowels | 81 (7) | 76 (15) | 41 (6) | 198 (9) |
| Blood in stool | 120 (10) | 119 (23) | 84 (13) | 323 (14) |

Data are n (%), or median (lower-upper quartile) unless otherwise stated. Records with missing values were excluded for all variables.

Percentages are rounded to nearest whole number.

Supplementary Table B: FIT Test Perceptions - Return Day Questionnaire

| | Study catchment area | | | |
|--|----------------------|--------------------|--------------------|-------------------------|
| | Osun n=1054 (%) | Lagos n=459 (5) | Kwara n=597 (%) | All sites n=2110 (%) |
| FIT Perceptions Survey Return Rate | 1054/1150 (92) | 459/524 (88) | 597/656 (91) | 2110/2330 (91) |
| How would you rate your overall test experience? | | | | |
| Very bad | 3 (0) | 0 (0) | 0 (0) | 3 (0) |
| Bad | 1 (0) | 0 (0) | 0 (0) | 1 (0) |
| Neutral | 2 (0) | 0 (0) | 0 (0) | 2 (0) |
| Good | 153 (15) | 46 (10) | 61 (10) | 260 (11) |
| Very good | 893 (85) | 413 (90) | 536 (90) | 1842 (79) |
| Would you participate in stool testing for cancer if screening was free? | | | | |
| Yes | 1030 (98) | 455 (99) | 595 (100) | 2080 (89) |
| No | 5 (1) | 4 (1) | 1 (0) | 10 (0) |
| Missing | 19 (2) | 0 (0) | 1 (0) | 20 (1) |
| Would you recommend the test to family or friends? | | | | |
| Yes | 1041 (99) | 457 (100) | 595 (100) | 2093 (90) |
| No | 1 (0) | 1 (0) | 1 (0) | 3 (0) |
| Unsure | 2 (0) | 0 (0) | 1 (0) | 3 (0) |
| Missing | 10 (1) | 1 (0) | 0 (0) | 11 (1) |
| The test was easy to use | | | | |
| Strongly disagree | 4 (0) | 0 (0) | 0 (0) | 4 (0) |
| Disagree | 1 (0) | 0 (0) | 3 (1) | 4 (0) |
| Neutral | 2 (0) | 1 (0) | 1 (0) | 4 (0) |
| Agree | 188 (18) | 41 (9) | 54 (9) | 283 (12) |
| Strongly agree | 844 (80) | 416 (91) | 539 (90) | 1799 (77) |
| Would you pay to have this test performed? | | | | |
| Yes | 802 (76) | 408 (89) | 490 (82) | 1700 (73) |
| No | 252 (24) | 51 (11) | 107 (18) | 410 (18) |
| If yes, how much (Naira)? | | | | |
| Median | 1000 | 2000 | 1000 | 1500 |
| IQR | 500-3000 | 1000-5000 | 1000-3000 | 1000-5000 |

Data are n (%), or median (IQR) unless otherwise stated. Records with missing values were excluded for all variables.

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