

The 2024/2025 Rwanda Over the Counter Medication Mobile phone survey, conducted by the Rwanda Ministry of Health and the Rwanda NCD Alliance was a nationally representative mobile phone survey of men and women aged 18 years and older designed to produce estimates on over-the-counter medication use....

The survey employed a two-phase sample design to produce key indicators for the country stratified by male/female and age. In phase one a sample of mobile phone numbers from an implicit frame of all possible mobile phone numbers was generated via random digit dialing. In phase two, phase one respondents were stratified to the general population distribution. A total of 355,634 mobile phone numbers were dialed, of which 12,549 mobile phone users were screened, and yielded 3,833 completed interviews. The overall response rate was 2.7%.

	Overall			Men			Women			Item Non-response*
Demographic (sample)	3,833			2,182			1,651			
Age	n	%		n	%		n	%		
18-29	1676	43.7		895	41.0		781	47.3	N/A	
30-44	1449	37.8		780	35.7		669	40.5	N/A	
45+	708	18.5		507	23.2		201	12.2	N/A	
Total	3833			2182	56.9%		1651	43.1%		
Region	n	%	(95% CI)	n	%	(95% CI)	n	%	(95% CI)	
City of Kigali	1173	30.7	(29.2, 32.4)	661	30.5	(28.6, 32.5)	512	30.9	(28.5, 33.4)	0.6%
East	840	22.0	(20.6, 23.5)	497	22.9	(21.2, 24.7)	343	21.2	(19.1, 23.5)	
West	648	16.8	(15.6, 18.2)	394	18.2	(16.6, 19.9)	254	15.6	(13.7, 17.7)	
South	684	18.4	(17.1, 19.8)	352	16.2	(14.7, 17.8)	332	20.4	(18.3, 22.6)	
North	465	12.0	(11.0, 13.2)	265	12.2	(10.9, 13.6)	200	11.9	(10.3, 13.7)	
Urbanicity	n	%	(95% CI)	n	%	(95% CI)	n	%	(95% CI)	
City	1734	46.0	(44.3, 47.7)	1008	46.6	(44.5, 48.7)	726	45.5	(42.8, 48.2)	0.7%
Rural	2074	54.0	(52.3, 55.7)	1157	53.4	(51.3, 55.5)	917	54.5	(51.8, 57.2)	
Health Insurance	n	%	(95% CI)	n	%	(95% CI)	n	%	(95% CI)	
Has health insurance	3759	86.6	(85.4, 87.7)	2148	87.5	(86.0, 88.8)	1611	85.8	(83.8, 87.6)	1.9%
Type of health insurance (among those with health insurance)										
Community Based Health Insurance	2059	63.0	(61.2, 64.8)	1156	61.9	(59.7, 64.1)	903	64.1	(61.2, 66.9)	0.9%
Rwanda Social Security Board (RSSB)	761	24.1	(22.5, 25.8)	460	24.8	(22.9, 26.8)	301	23.5	(21.0, 26.2)	
Military Medical Insurance (MMI)	164	5.0	(4.3, 5.9)	105	5.6	(4.7, 6.8)	59	4.4	(3.3, 5.8)	
Private Insurance (UAP, Sanlam, Britam, etc.)	244	7.8	(6.8, 8.9)	142	7.7	(6.5, 9.0)	102	8.0	(6.5, 9.8)	
Type of health insurance (among the population)										
None	503	13.5	(12.4, 14.7)	270	12.6	(11.3, 14.1)	233	14.3	(12.5, 16.3)	N/A
Community Based Health Insurance	2059	54.5	(52.8, 56.3)	1156	54.1	(52.0, 56.2)	903	54.9	(52.2, 57.6)	
Rwanda Social Security Board (RSSB)	761	20.9	(19.5, 22.3)	460	21.7	(20.0, 23.5)	301	20.1	(18.0, 22.5)	
Military Medical Insurance (MMI)	164	4.3	(3.7, 5.1)	105	4.9	(4.1, 5.9)	59	3.8	(2.9, 5.0)	
Private Insurance (UAP, Sanlam, Britam, etc.)	244	6.8	(5.9, 7.7)	142	6.7	(5.7, 7.8)	102	6.8	(5.5, 8.4)	
Noncommunicable Diseases	n	%	(95% CI)	n	%	(95% CI)	n	%	(95% CI)	
Ever NCD (requiring medication)	3762	27.2	(25.6, 28.8)	2137	24.0	(22.3, 25.9)	1625	30.0	(27.6, 32.6)	1.9%
Currently taking medication for NCD	930	58.5	(55.1, 61.7)	503	52.2	(48.0, 56.4)	427	63.0	(58.1, 67.5)	1.6%
How long taking medication										
Less than 6 months	155	29.0	(24.8, 33.6)	85	32.9	(27.4, 38.9)	70	26.6	(20.9, 33.2)	1.4%
Six to 12 months	36	6.3	(4.5, 8.9)	18	6.9	(4.4, 10.8)	18	6.0	(3.6, 9.8)	
Greater than 1 year	241	51.1	(46.1, 56.0)	120	46.9	(40.9, 53.0)	121	53.5	(46.4, 60.5)	
Don't know	65	13.6	(10.5, 17.6)	34	13.3	(9.6, 18.0)	31	13.9	(9.5, 19.8)	
Currently taking medication for NCD among the population	3747	15.7	(14.4, 17.1)	261	12.4	(11.1, 13.9)	243	18.7	(16.5, 21.1)	N/A
OTC Knowledge	n	%	(95% CI)	n	%	(95% CI)	n	%	(95% CI)	
When I know cause of health problem, can purchase medicine w/o doctor										
Strongly agree	691	18.7	(17.3, 20.0)	429	21.0	(19.3, 22.8)	262	16.5	(14.6, 18.6)	6.6%
Agree	471	12.9	(11.7, 14.1)	277	13.6	(12.2, 15.1)	194	12.2	(10.6, 14.1)	
Uncertain	331	9.1	(8.1, 10.1)	201	9.9	(8.7, 11.3)	130	8.4	(7.0, 10.0)	
Disagree	766	21.9	(20.4, 23.4)	421	20.7	(19.0, 22.5)	345	23.0	(20.7, 25.4)	
Strongly disagree	1321	37.5	(35.8, 39.3)	710	34.8	(32.8, 36.9)	611	39.9	(37.2, 42.7)	
Have enough knowledge about side effects w/o doctor										
Strongly agree	1743	49.2	(47.4, 51.0)	1018	50.5	(48.3, 52.7)	725	48.0	(45.2, 50.8)	7.6%
Agree	551	15.4	(14.1, 16.7)	306	15.2	(13.7, 16.8)	245	15.5	(13.7, 17.6)	
Uncertain	283	8.0	(7.1, 9.0)	159	7.9	(6.8, 9.2)	124	8.1	(6.7, 9.7)	
Disagree	369	10.6	(9.6, 11.8)	206	10.2	(9.0, 11.6)	163	11.0	(9.3, 12.9)	
Strongly disagree	595	16.8	(15.5, 18.2)	325	16.2	(14.6, 17.9)	270	17.4	(15.4, 19.6)	
Can use old prescriptions to purchase medicine										
Strongly agree	616	16.6	(15.3, 17.9)	387	19.5	(17.8, 21.3)	229	13.9	(12.2, 15.8)	9.2%
Agree	303	9.0	(8.0, 10.2)	167	8.4	(7.3, 9.7)	136	9.6	(8.0, 11.5)	
Uncertain	210	5.8	(5.1, 6.7)	119	6.0	(5.0, 7.1)	91	5.6	(4.5, 7.0)	
Disagree	788	23.0	(21.5, 24.6)	434	21.9	(20.1, 23.8)	354	24.0	(21.7, 26.5)	
Strongly disagree	1562	45.6	(43.8, 47.4)	874	44.2	(42.0, 46.4)	688	46.8	(44.0, 49.6)	
Self-medication always makes me feel better										
Strongly agree	388	10.9	(9.8, 12.0)	236	12.1	(10.7, 13.6)	152	9.7	(8.2, 11.5)	11.0%
Agree	428	12.2	(11.1, 13.4)	253	13.0	(11.6, 14.6)	175	11.5	(9.8, 13.3)	
Uncertain	233	6.4	(5.6, 7.3)	148	7.6	(6.5, 8.8)	85	5.3	(4.2, 6.6)	
Disagree	850	25.5	(23.9, 27.1)	470	24.1	(22.3, 26.1)	380	26.7	(24.4, 29.3)	
Strongly disagree	1513	45.1	(43.3, 46.9)	841	43.2	(41.0, 45.4)	672	46.9	(44.0, 49.7)	
OTC Practices	n	%	(95% CI)	n	%	(95% CI)	n	%	(95% CI)	
Frequently taking OTC medicines w/o prescription is ok										
Strongly agree	447	12.0	(10.9, 13.1)	272	13.4	(12.0, 15.0)	175	10.6	(9.1, 12.4)	6.9%
Agree	302	8.3	(7.3, 9.3)	179	8.9	(7.7, 10.2)	123	7.7	(6.4, 9.3)	
Uncertain	436	12.0	(10.9, 13.2)	261	12.9	(11.5, 14.4)	175	11.1	(9.5, 13.0)	
Disagree	1004	28.8	(27.2, 30.5)	557	27.5	(25.6, 29.5)	447	30.0	(27.5, 32.6)	
Strongly disagree	1380	39.0	(37.3, 40.8)	754	37.3	(35.2, 39.4)	626	40.5	(37.8, 43.2)	
Using other family member medicines for same illness ok										
Strongly agree	332	9.1	(8.2, 10.2)	200	10.0	(8.7, 11.4)	132	8.4	(7.0, 10.0)	8.0%
Agree	220	6.0	(5.2, 6.9)	127	6.3	(5.4, 7.5)	93	5.7	(4.6, 7.1)	
Uncertain	224	5.9	(5.2, 6.7)	131	6.5	(5.5, 7.7)	93	5.3	(4.3, 6.6)	
Disagree	946	26.7	(25.1, 28.3)	537	26.8	(24.9, 28.8)	409	26.5	(24.1, 29.0)	
Strongly disagree	1806	52.3	(50.5, 54.1)	1003	50.3	(48.1, 52.5)	803	54.0	(51.3, 56.8)	

Prefer using OTC medicine because of cost of doctor										
Strongly agree	379	10.3	(9.3, 11.3)	235	11.9	(10.6, 13.4)	144	8.8	(7.4, 10.4)	9.3%
Agree	202	5.7	(4.9, 6.6)	120	6.1	(5.1, 7.3)	82	5.3	(4.2, 6.7)	
Uncertain	336	9.3	(8.3, 10.3)	207	10.5	(9.2, 12.0)	129	8.1	(6.8, 9.8)	
Disagree	912	26.2	(24.7, 27.8)	497	25.2	(23.3, 27.2)	415	27.1	(24.7, 29.7)	
Strongly disagree	1647	48.6	(46.8, 50.4)	909	46.2	(44.1, 48.5)	738	50.6	(47.8, 53.4)	
Prefer using OTC medicine because of no time to visit doctor										
Strongly agree	506	14.0	(12.9, 15.3)	317	16.4	(14.8, 18.1)	189	12.0	(10.3, 13.8)	11.0%
Agree	339	9.3	(8.4, 10.4)	204	10.5	(9.3, 12.0)	135	8.2	(6.9, 9.8)	
Uncertain	203	5.9	(5.1, 6.8)	126	6.6	(5.5, 7.8)	77	5.2	(4.1, 6.7)	
Disagree	867	25.6	(24.0, 27.2)	466	24.1	(22.2, 26.0)	401	26.9	(24.4, 29.4)	
Strongly disagree	1497	45.2	(43.4, 47.0)	817	42.4	(40.2, 44.6)	680	47.7	(44.9, 50.5)	
Healthcare Seeking Behavior	n	%	(95% CI)	n	%	(95% CI)	n	%	(95% CI)	
How often sought medical advice or treatment in past 12 months										
Never	831	22.8	(21.4, 24.3)	561	28.2	(26.3, 30.3)	270	17.9	(15.8, 20.1)	9.2%
Rarely	1230	35.5	(33.7, 37.2)	683	34.4	(32.4, 36.6)	547	36.4	(33.7, 39.1)	
Sometimes	861	24.1	(22.7, 25.7)	465	23.5	(21.7, 25.4)	396	24.7	(22.5, 27.1)	
Often	358	11.5	(10.3, 12.8)	156	7.9	(6.8, 9.1)	202	14.8	(12.8, 17.0)	
Always	200	6.1	(5.3, 7.1)	118	6.0	(5.0, 7.1)	82	6.3	(4.9, 7.9)	
Among those who sought any treatment in the past 12 months										
Where sought medical advice or treatment for last illness										
Healthcare professional	1863	73.1	(71.3, 74.8)	940	67.0	(64.5, 69.5)	923	77.9	(75.3, 80.2)	1.4%
Pharmacy/drug shop	376	13.1	(11.9, 14.4)	236	16.8	(14.9, 18.8)	140	10.2	(8.6, 12.0)	
Traditional healer	91	3.4	(2.7, 4.3)	55	3.9	(3.0, 5.1)	36	3.0	(2.1, 4.3)	
Family or friends	37	1.3	(0.9, 1.8)	19	1.3	(0.9, 2.1)	18	1.2	(0.8, 1.9)	
Internet (websites, forums, social media)	49	1.8	(1.4, 2.5)	24	1.7	(1.1, 2.5)	25	1.9	(1.3, 2.9)	
Self-medication with OTC medicine	123	4.3	(3.6, 5.2)	87	6.2	(5.1, 7.6)	36	2.8	(2.0, 4.0)	
Other	46	1.7	(1.3, 2.4)	29	2.1	(1.4, 2.9)	17	1.5	(0.9, 2.5)	
Did not seek advice or treatment	28	1.2	(0.8, 1.9)	13	0.9	(0.5, 1.6)	15	1.5	(0.9, 2.6)	
Affected decision to seek medical care or treatment for last illness (Among those who sought any treatment in the past 12 months)										
Severity of symptoms	2561	83.5	(81.8, 85.0)	1373	82.1	(80.0, 84.1)	1188	84.5	(82.0, 86.7)	2.4%
Cost of healthcare	2533	58.1	(56.0, 60.2)	1354	58.3	(55.7, 60.9)	1179	57.9	(54.8, 61.0)	2.0%
Trust in healthcare professionals	2512	91.1	(89.9, 92.2)	1348	89.8	(88.1, 91.3)	1164	92.1	(90.3, 93.6)	1.6%
Experience with OTC medicine	2463	39.1	(37.1, 41.2)	1323	43.8	(41.2, 46.5)	1140	35.4	(32.5, 38.5)	2.4%
Past experience with similar symptoms	2434	51.5	(49.3, 53.6)	1300	51.9	(49.2, 54.6)	1134	51.1	(47.9, 54.3)	2.2%
Outside influences (family, friends, social media)	2406	42.2	(40.0, 44.3)	1289	44.1	(41.5, 46.9)	1117	40.6	(37.5, 43.8)	2.0%
OTC Medication Use	n	%	(95% CI)	n	%	(95% CI)	n	%	(95% CI)	
How often uses OTC medication										
Never	1137	32.6	(30.9, 34.3)	642	32.2	(30.2, 34.3)	495	32.9	(30.3, 35.6)	8.6%
Rarely	1280	36.7	(35.0, 38.4)	718	36.0	(34.0, 38.2)	562	37.3	(34.6, 40.0)	
Sometimes	760	21.4	(20.0, 22.9)	442	22.2	(20.4, 24.1)	318	20.7	(18.6, 23.1)	
Often	200	5.7	(5.0, 6.6)	109	5.5	(4.5, 6.6)	91	6.0	(4.8, 7.5)	
Always	126	3.6	(3.0, 4.3)	81	4.1	(3.3, 5.0)	45	3.1	(2.3, 4.3)	
Would use OTC medication because of... (Among those who report any OTC medication use)										
Convenience	2306	46.5	(44.3, 48.7)	1321	50.5	(47.8, 53.2)	985	42.8	(39.5, 46.3)	2.5%
Perceived efficacy	2287	35.3	(33.2, 37.4)	1309	38.6	(36.0, 41.2)	978	32.3	(29.1, 35.6)	1.9%
Recommendations by family or friends	2255	30.0	(28.0, 32.1)	1291	32.7	(30.2, 35.3)	964	27.6	(24.6, 30.8)	2.2%
Recommendation by pharmacist	2232	56.5	(54.3, 58.8)	1280	59.6	(56.9, 62.2)	952	53.7	(50.2, 57.2)	1.7%
Previous positive experience	2206	58.5	(56.3, 60.8)	1266	58.9	(56.1, 61.6)	940	58.2	(54.7, 61.7)	1.6%
Side Effects (among those who report any OTC medication use)										
Has experienced bad side effects from OTC medication	2177	26.7	(24.7, 28.7)	1246	27.4	(25.0, 29.9)	931	26.0	(23.0, 29.2)	1.5%
What was done to manage bad side effects (among those who report bad side effects)										
Nothing	162	27.9	(24.1, 32.0)	97	29.1	(24.5, 34.2)	65	26.7	(21.0, 33.4)	1.9%
Went to doctor or health facility	306	53.7	(49.3, 58.1)	168	50.2	(44.8, 55.5)	138	57.1	(50.0, 63.9)	
Went to pharmacist	81	13.7	(11.0, 16.9)	52	15.6	(12.1, 20.0)	29	11.8	(8.0, 17.1)	
Other	28	4.7	(3.2, 7.0)	17	5.1	(3.2, 8.1)	11	4.4	(2.3, 8.3)	

*Item nonresponse is calculated as: $1 - \frac{I}{(I+V_x)}$, where I equals the number of valid responses for question x, I equals the total number of respondents in the survey, and V_x equals the respondents with a valid skip for question x (i.e. an answer to a previous question prevented them from being asked question x).