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**Desirable Use of Healthcare**

**Late use of formal (undesirable 1)**

**Undesirable Use of Healthcare**

**Only informal (undesirable 2)**

NB: Formal refers to use of private or public health facilities for malaria treatment.

Desirable is the use of formal treatment as at least second treatment choice, and otherwise undesirable. This definition follows the recommendation by Ministry of Health, Ghana.

Supplementary Table 1 Description of Health Literacy Profiles

|  |  |  |  |
| --- | --- | --- | --- |
| Profile | N (%) | Label | Description |
| Profile 1 | 34 (3%) | Higher scores across health literacy scales | Caregivers scored highly across all scales thus, they had the necessary skills and competence to seek healthcare with better appraisal and understanding of health information. Their least score was in social support. 85% of caregivers were within ages 25-44 and none above this age. 38% had < 9 years of schooling, 18% with >12 years of schooling and the highest (81%) recorded employed profile. 82% reported to have the National Health Insurance and 65% resorted to desirable use of healthcare. 50% of respondents here spoke English at home. |
| Profile 2 | 330 (27%) | Moderate to high scores, predominantly actively engaged in health | With moderate to high score, caregivers in this profile were best at actively managing their health and engaging with health providers. They had good support socially and from health providers. Majority (76%) of caregivers were between age 25-44 years, with a 4% older (45-69 years) respondents. 83% had < 9 years of schooling, 3% with >12 years of schooling and 71% were employed. 87% reported to be registered under the National Health Insurance Scheme and 59% of caregivers here used desirable healthcare option. |
| Profile 3 | 198 (16%) | Moderate to high scores across scales but lack health provider support | Within this profile, caregivers had moderate scores with relatively low scores under having health provider support although they were actively involved in their health. 79% of caregivers were within ages 25-44, with almost 5% between ages 45-69 years. 73% had <9 years of schooling, 2% with >12 years of education and 63% were employed. 94% of caregivers reported to be users of the National Health Insurance, with high (66%) use of desirable healthcare. |
| Profile 4 | 394 (32%) | Moderate scores across scales but better at understanding health information | Caregivers scored moderately across all scales and 50% of total male respondents (30) had this profile. Majority of caregivers (32%) were within this profile, 79% of them were between age 25-44 years and 3% in the 45-69 age group. 73% had < 9years of schooling, 1% with >12 years of schooling and 66% of caregivers here were employed. 81% reported to have National Health Insurance but 43% resorted to use of undesirable healthcare |
| Profile 5 | 132 (11%) | Moderate scores but limited skills in appraisal and lack of health provider support | With moderate to low scores, caregivers lacked health provider support with low skills in critically appraising health information. 75% were within ages 25-44 years and 3% in the 45-69 age bracket. 63% had < 9 years of schooling, 3% with >12 years of schooling, and 63% were employed. Almost 64% reportedly had National Health Insurance and most caregivers (55%) here used desirable healthcare. |
| Profile 6 | 117 (9.48%) | Generally low scores across dimensions and struggled most with health provider support | Caregivers scored low in all nine dimensions, particularly unskilled in appraisal of health information and lacked support from health providers. Like other profiles, majority of caregivers (70%) were within ages 25-44 but with 25% within age 15-24 years. 61% had < 9 years of schooling with almost 1% having >12 years of schooling and 43% of respondents here were unemployed. 71% reported membership of the National Health Insurance Scheme (NHIS) yet almost 41% used undesirable healthcare. |
| Profile 7 | 29 (2.35%) | least scores across all scales | Scores from this profile were generally low across scales. Caregivers here were not actively involved in their health, unable to navigate the health system, lacked support but comparatively better in social support and lacked skills to critically appraise and understand health information. 69% of respondents were between the ages 25-44, 28% within the 15-24 years age group, representing a relatively younger caregiver group. 76% of the caregivers had <9 years of schooling, none with >12 years of schooling and the highest (66%) recorded unemployed caregivers. 69% reportedly had subscribed to NHIS yet 69% resorted to undesirable use of healthcare. None of these respondents spoke English at home. |

Supplementary Table 2 Frequency of Incidence of malaria across health literacy clusters

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Incidence of malaria | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Total |
| No (%) | 208 (52.8) | 58 (49.6) | 74 (56.1) | 13 (44.8) | 111 (56.1) | 17 (50.0) | 165 (50.0) | 646 (52.4) |
| Yes (%) | 186 (47.2) | 59 (50.4) | 58 (43.9) | 16 (55.2) | 87 (43.9) | 17 (50.0) | 165 (50.0) | 588 (47.6) |
| Total | 394 | 117 | 132 | 29 | 198 | 34 | 330 | 1234 |