

# Malaria: Studies Reporting Health Outcomes

Title	Authors	Journal & Link	Location	Population	Intervention Description	Outcomes	Design	Sampling Method	SOE Score <sup>1</sup>	SMBC <sup>2</sup>
Effect of expanded insecticide-treated bednet coverage on child survival in rural Kenya: a longitudinal study	Fegan GW, Noor AM, Akhwale WS, Cousens S, Snow RW	Lancet, 2007, 370(9592): 1035–1039 <a href="http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(07)61477-9/abstract">http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(07)61477-9/abstract</a>	Kenya	Children aged 1–59 months	Combined approach of social marketing and free distribution of ITNs	<b>Behaviors</b>  Increase in ITN use by children aged less than 5 years from 7% in 2004, to 23·5% in 2005, to 67% in 2006  <b>Health</b>  ITN use was associated with a 44% reduction in mortality	Observational	Probability	4	0
Socially marketed insecticide-treated nets effectively reduce Plasmodium infection and anaemia among children in urban Malawi	Mathanga DP, Campbell CH, Taylor TE, Barlow R, Wilson ML	Tropical Medicine and International Health, 2006, 11(9): 1367-1374 <a href="http://onlinelibrary.wiley.com/doi/10.1111/j.1365-3156.2006.01684.x/abstract">http://onlinelibrary.wiley.com/doi/10.1111/j.1365-3156.2006.01684.x/abstract</a>	Ndirande, Blantyre, Malawi	Children age 6-59 months	ITN social marketing (PSI)	<b>Behaviorial Factors</b>  Knowledge of ITNs  <b>Behaviors</b>  42% of children reported ITN use the previous night  <b>Health</b>  17% (295/1721) of children had a positive P. falciparum smear at enrolment. Use of ITNs was associated with 52% protective efficacy against Plasmodium parasitemia. More than two-thirds of children were anaemic, yet the mean haemoglobin concentration was significantly higher in children using ITNs than in those not using nets.	Observational	Probability	4	2: Segmentation, Methods mix
Reduction of childhood malaria by social marketing of insecticide-treated nets: a case-control study of effectiveness in Malawi	Mathanga DP, Campbell CH, Taylor TE, Barlow R, Wilson ML	The American journal of tropical medicine and hygiene, 2005, 73(3): 622-625 <a href="http://www.ajtmh.org/content/73/3/622.long">http://www.ajtmh.org/content/73/3/622.long</a>	Blantyre, Malawi	Case-control study of children under 5 with history of fever within last 48 hours	ITN social marketing (PSI)	<b>Behaviorial Factors</b>  ITN coverage  <b>Health</b>  Individual effectiveness of ITN use was 40% (95% confidence interval [CI] 10–60%) when cases were compared with clinic controls and 50% (95% CI 0–60%) in comparison with community controls; 1,480 malaria cases averted by the intervention in a population of 15,000 children	Quasi-experimental	Probability	5	2: Segmentation, Methods mix

Notes

1. Strength of Evidence Score    2. Social Marketing Benchmark Criteria

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Spatial effects of the social marketing of insecticide-treated nets on malaria morbidity	Abdulla S, Gemperli A, Mukasa O, Armstrong Schellenberg JR, Lengeler C, Vounatsou P, Smith T	Tropical Medicine and International Health, 2005, 10(1): 11–18 <a href="http://onlinelibrary.wiley.com/doi/10.1111/j.1365-3156.2004.01354.x/abstract">http://onlinelibrary.wiley.com/doi/10.1111/j.1365-3156.2004.01354.x/abstract</a>	Tanzania	Households	Social marketing of ITNs	<b>Behaviorial Factors</b>  Coverage, distribution pattern and resultant spatial effects  <b>Behaviors</b>  Percent of children using a treated net  <b>Health</b>  Prevalence of parasitaemia, mild anaemia (Hb <11 g/dl) and moderate/severe anaemia (Hb <8 g/dl) in children under five; children living in areas of moderately high ITN coverage were about half as likely to have moderate/severe anaemia	Observational	Probability	4	0
DEET mosquito repellent sold through social marketing provides personal protection against malaria in an area of all-night mosquito biting and partial coverage of insecticide-treated nets: a case-control study of effectiveness	Rowland M, Freeman T Downey G, Hadi A, Saeed M	Tropical medicine & international health, 2004, 9(3): 343-350 <a href="http://onlinelibrary.wiley.com/doi/10.1046/j.1365-3156.2003.01183.x/abstract">http://onlinelibrary.wiley.com/doi/10.1046/j.1365-3156.2003.01183.x/abstract</a>	Behsud district, Nangahar province, eastern Afghanistan	Case-control study of outpatients with febrile illness	Social marketing of a repellent soap containing DEET	<b>Behaviors</b>  Mosbar was purchased by 43% of households among the control group. There was a strong association between Mosbar use and ITN use, as 81% of Mosbar users also possessed ITN.  <b>Health</b>  The use of Mosbar was associated with a 45% reduction in the odds of malaria after adjusting for ITN and other unmatched factors	Quasi-experimental	Purposive	4	2: Insight, Methods mix
Cost-effectiveness of social marketing of insecticide-treated nets for malaria control in the United Republic of Tanzania	Hanson K, Kikumbih N, Armstrong Schellenberg J, Mponda H, Nathan R, Lake S, Mills A, Tanner M, Lengeler C	Bulletin of the World Health Organization, 2003, 81(4): 269-276 <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2572445/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2572445/</a>	Kilombero and Ulanga districts, Tanzania	Case-control study on child survival and demographic surveillance system	ITN and insecticide social marketing	<b>Behaviors</b>  ITN coverage, measured as the proportion of children that slept under a treated net the previous night, was 14% in Ulanga and 23% in Kilombero in July and August 1999.  <b>Health</b>  Given the estimate of 27% for protective efficacy from the case–control study, this indicates 96 deaths averted or 2588 DALYs averted in 1999.	Quasi-experimental	Purposive	4	5: Customer orientation, Insight, Exchange, Segmentation, Method mix

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Insecticide-treated bednet use, anaemia, and malaria parasitaemia in Blantyre District, Malawi	Holtz TH, Marum LH, Mkandala C, Chizani N, Roberts JM, Macheso A, Parise ME, Kachur SP	Tropical Medicine and International Health, 2002, 7(3): 220–230 <a href="http://onlinelibrary.wiley.com/doi/10.1046/j.1365-3156.2002.00846.x/abstract">http://onlinelibrary.wiley.com/doi/10.1046/j.1365-3156.2002.00846.x/abstract</a>	Blantyre District, Malawi	Households with at least one child less than 5 years of age	Social marketing of ITNs (PSI)	<b>Behaviorial Factors</b>  Bednet ownership was low (20.5% of households)  <b>Behaviors</b>  Only 3.3% of rural children under 5 had slept under a net the previous night, compared with 24.0% of urban children  <b>Health</b>  rural children under 5 in households without nets experienced a statistically significant higher prevalence of malaria parasitaemia [RR 4.9] than children in households with at least one bednet	Observational	Probability	4	6: Behavior, Customer orientation, Insight, Exchange, Segmentation, Methods mix
Prevention of malaria in Afghanistan through social marketing of insecticide-treated nets: evaluation of coverage and effectiveness by cross-sectional surveys and passive surveillance	Rowland M, Webster J, Saleh P, Chandramohan D, Freeman T, Percy B, Durrani N, Rab A, Mohammed N	Tropical medicine & international health, 2002, 7(10): 813-822 <a href="http://onlinelibrary.wiley.com/doi/10.1046/j.1365-3156.2002.00940.x/abstract">http://onlinelibrary.wiley.com/doi/10.1046/j.1365-3156.2002.00940.x/abstract</a>	Afghanistan	Cross-sectional surveys of housholds and passive surveillance from clinics using case-control design	ITN and insecticide social marketing	<b>Behaviors</b>  Nets were purchased by 59% of families.  <b>Health</b>  Cross-sectional surveys demonstrated a 59% reduction in the risk of Plasmodium falciparum infection among ITN users compared with non-users and the passive surveillance method showed a 69% reduction in the risk of symptomatic P. falciparum malaria among ITN users; reductions in risk of P. vivax infection was also seen, but only statistically significant under passive surveillance	Observational	Probability	4	2: Exchange, Methods mix
Effect of large-scale social marketing of insecticide-treated nets on child survival in rural Tanzania	Schellenberg JR, Abdulla S, Nathan R, Mukasa O, Marchant TJ, Kikumbih N, Mushi AK, Mponda H, Minja H, Mshinda H, Tanner M, Lengeler C	Lancet, 2001, 357(9264): 1241-7 <a href="http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(00)04404-4/fulltext">http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(00)04404-4/fulltext</a>	Kilombero and Ulanga Districts in South-western Tanzania	Case-control study among children age 1 month to 4 years and a demographic surveillance system survey of households	ITN social marketing	<b>Behaviorial Factors</b>  Insecticide-treated net coverage of infants in the study area rose from less than 10% at baseline to more than 50% 3 years later.  <b>Health</b>  Insecticide-treated nets were associated with a 27% increase in survival in children aged 1 month to 4 years.	Quasi-experimental	Purposive	4	6: Behavior, Customer orientation, Insight, Exchange, Segmentation, Methods mix

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Impact of malaria morbidity of a programme supplying insecticide treated nets in children aged under 2 years in Tanzania: Community cross sectional study	Abdulla S, Schellenberg JA, Nathan R, Mukasa O, Marchant T, Smith T, Tanner M, Lengeler C	British Medical Journal, 2001, 322: 270-273 <a href="http://www.bmj.com/content/322/7281/270">http://www.bmj.com/content/322/7281/270</a>	Tanzania	Children under age 2	Social marketing of ITNs and insecticide	<b>Behaviorial Factors</b>  Net ownership of treated nets increased 10% to 61%  <b>Health</b>  Prevalence of parasitemia and haemoglobin levels; prevalence of anemia decreased from 49% to 26%; Treated nets had a protective efficacy of 62% on prevalence of parasitaemia and of 63% on anaemia.	Observational	Probability	4	1 : Methods mix

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