

Table 2b Evolution of the monthly risks of receiving an infective bite of the main vector of malaria in a house before, and after, installation of LLINs + ZF; with the difference of risks

LLIN+ZF	Before	After	Diff.
M1	61.0	15.6	-74.5%
M2	84.8	30.4	-64.2%
M3	94.1	41.9	-55.5%
M4	97.7	51.5	-47.3%
M5	99.1	59.6	-39.9%
M6	99.7	66.3	-33.5%
M7	99.9	71.9	-28.0%
M8	100.0	76.5	-23.5%
M9	100.0	80.5	-19.5%
M10	100.0	83.7	-16.3%
M11	100.0	86.4	-13.7%
M12	100.0	88.6	-11.4%

Comparing the reduction of monthly risks conferred by the combination LLN + ZF (Table 2b; column 4) and of LLINs alone (Table 1b; column 4) it appeared that adding ITPS on the wall to nets on sleeping units (Table 2c) exponentially increased the reduction of risks (Table 2c) by some 40% in six months and even >50% in one year (Graph 2d).

Table 2c Difference of risks in house with LLINs in combination of ITPS versus houses with LLIN alone

Months	diff risks
M1	-32.6%
M2	-32.9%
M3	-34.2%
M4	-35.7%
M5	-37.6%
M6	-39.4%
M7	-41.8%
M8	-44.7%
M9	-47.2%
M10	-49.7%
M11	-52.6%
M12	-55.3%

3.3 Evolution of risks before and after ITPS alone model ZeroVector®

With full coverage in ITPS ZV only, the number of main vectors per trap decreased from 0.42 to 0.07 and the sporozoite index remained almost the same: 4.54% then 4.76%. With these data in the Birley's formula it is possible to calculate the risks of receiving an infective bite in sleeping one day, one week, one month (Graph 3a and 3b), one year (Graph 3c) in a house before, and after, installation of ITPS ZV alone.

3.3.1 Evolution of the weekly risk in one month

In a house without vector control, the weekly risk sharply increased, 2% in one day; 13% in one week; 24% in two weeks; 34% in three weeks and 42% in four weeks (Graph 3b). With installation of ITPS ZV® alone they were respectively reduced to 0.3%; 2.4%; 5%; 7% and 9%; meaning that ITPS alone conferred some 80% reduction of risks the first month (Table 3a).