

Contents

1.	Introduction	1
2.	Current global malaria situation	3
3.	Implementation status of the Global Malaria Control Strategy	7
3.1	Provision of early diagnosis and prompt treatment	7
3.2	Implementation of selective and sustainable preventive measures	9
3.2.1	Vector control	9
3.2.2	Environmental management	10
3.2.3	Biological control: use of larvivorous fish	10
3.2.4	Chemoprophylaxis	10
3.3	Early detection, containment or prevention of malaria epidemics	11
3.4	Capacity building	11
3.5	Prevention of the re-emergence of malaria	12
4.	Relationship of malaria control programmes to health sector reforms	12
4.1	Decentralization of the health system	13
4.2	Health-care financing reforms	14
4.3	Increased partnership with communities and the private sector	16
5.	Disease management	16
5.1	Management of uncomplicated malaria	17
5.1.1	Diagnosis	18
5.1.2	Availability and quality of treatment	24
5.2	Management of severe malaria at the periphery	25
6.	Drug resistance of malaria parasites	27
6.1	Monitoring of drug resistance	27
6.1.1	Monitoring of therapeutic efficacy	27
6.1.2	<i>In vitro</i> susceptibility testing	29
6.1.3	Surveillance-based molecular markers of drug resistance	29
6.2	International monitoring of the drug response of <i>P. falciparum</i>	30
6.3	Antimalarial treatment policy	30
6.4	Containment of parasite drug resistance	31
7.	Malaria epidemics: prediction, preparedness and control	32
7.1	Epidemic risk and epidemic-prone areas	32
7.2	Epidemic preparedness, prediction and prevention of epidemics	33
7.3	Epidemiological information systems	34
7.4	Epidemic response	35
7.5	Post-epidemic action	37
8.	Prevention of malaria	37
8.1	Selective vector control	37
8.1.1	Indoor residual spraying	38
8.1.2	Use of DDT in malaria control	38
8.1.3	Use of insecticide-treated materials	39
8.1.4	Management of malaria in development projects	40

8.1.5	New developments in Africa	41
8.1.6	Use of gametocytocidal drugs	42
8.2	Chemoprophylaxis	42
8.2.1	Chemoprophylaxis among non-immune people visiting endemic areas	42
8.2.2	Prevention of malaria in pregnancy	42
8.3	Malaria vaccines and basic research	44
8.4	Trends in insecticide resistance	44
8.5	Cost-effectiveness of preventive measures	46
9.	Information systems and operational research	46
9.1	Epidemiological indicators	46
9.1.1	Standardized case definitions	46
9.1.2	Indicators	48
9.2	Operational research	50
9.2.1	National programme capabilities for operational research	51
9.2.2	Constraints on operational research	51
9.2.3	Addressing the constraints	52
9.2.4	Priority areas for operational research related to programme objectives and policy	53
10.	Award of the Darling Medal and Prize	55
11.	Roll Back Malaria	56
12.	Conclusions and recommendations	57
12.1	Conclusions	57
12.2	Recommendations	59
12.2.1	General recommendation	59
12.2.2	Relationship of malaria control programmes with changing health sector reforms	59
12.2.3	Disease management	60
12.2.4	Drug resistance	60
12.2.5	Operational systems and operational research	61
12.2.6	Malaria in pregnancy	61
12.2.7	Vector control	62
12.2.8	DDT	63
12.2.9	Epidemics	63
	Acknowledgements	64
	References	65
	Annex 1	
	Use of DDT in vector control	69
	Annex 2	
	Improving information exchange	71