Table S1 MNM events by the WHO, Namibian and SSA clinical, laboratory and management criteria

	WHO n=71	Namibian n=118	SSA n=242
Clinical criteria	**44**	**82**	**174**
Acute cyanosis	0	0	0
Gasping	2	2	2
Respiratory rate >40 or <6/min	11	11	11
Shock	24	24	24
Oliguria non responsive to fluids or diuretics	6	6	6
Failure to form clots	4	4	4
Loss of consciousness lasting more than 12 h	10	10	10
Cardiac Arrest	2	2	2
Stroke	2	2	2
Uncontrollable fits / total paralysis	6	6	6
Jaundice in the presence of pre-eclampsia	0	0	0
Eclampsia [a]	✖	44	44
Ruptured uterus [a]	✖	1	1
Sepsis or severe systemic infection [b]	✖	✖	40
Pulmonary edema [b]	✖	✖	13
Severe complications of abortion [b]	✖	✖	21
Severe malaria [b]	✖	✖	0
Severe pre-eclampsia with ICU admission [b]	✖	✖	103
Laboratory criteria	**31**	**31**	**28**
Oxygen saturation <90% for >60 minutes	8	8	8
PaO2/FiO2 <200 mmHg [c]	0	0	✖
Creatinine ≥300μmol/l or ≥3.5 mg/dl	4	4	4
Bilirubin >100 μmol/l or > 6.0 mg/dl [c]	2	2	✖
pH <7.1 [c]	2	2	✖
Lactate >5 mEq/mL [c]	1	1	✖
Acute thrombocytopenia (<50.000 platelets/ml)	17	17	17
Loss of consciousness and glucose/ketoacids in urine	1	1	1
Management-based criteria	**34**	**48**	**122**
Use of continuous vasoactive drugs [c]	7	7	✖
Hysterectomy following infection or hemorrhage	4	4	4
Transfusion of .. units of blood or red cells	15[d]	31[e]	112[f]
Intubation and ventilation not related to anesthesia	15	15	15
Dialysis for acute renal failure	1	1	✖
Cardiopulmonary resuscitation	2	2	2
Laparotomy other than for caesarian section [b]	✖	✖	6
Laparotomy other than for caesarean or ectopic pregnancy [g]	✖	2	✖

Legend
[a] Criterion added by Namibian and SSA-tools; [b] Criterion added by SSA-tool; [c] Criterion excluded by SSA-tool; [d] Five blood products; [e] Four blood products; [f] Two blood products; [g] Criterion added by Namibian-tool; ✖ Not a criterion according to the specified tool

Table S2 MNM events by the WHO, Namibian and SSA organ-dysfunction criteria

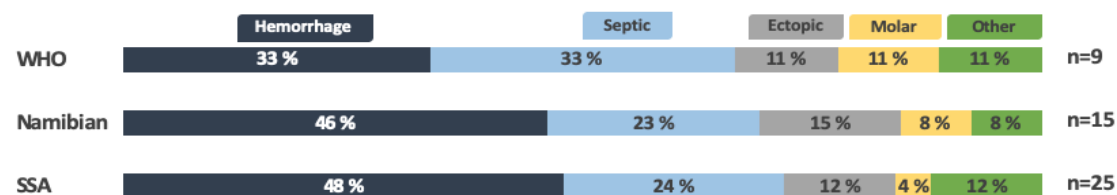|	WHO n=71	Namibian n=118	SSA n=242
Cardiovascular dysfunction	**29**	**29**	**26**
Shock	24	24	24
Cardiac Arrest	2	2	2
Use of continuous vasoactive drugs [a]	7	7	✖
Cardiopulmonary resuscitation	2	2	2
Lactate >5mml/l [a]	1	1	✖
pH <7.1 [a]	2	2	✖
Respiratory dysfunction	**22**	**22**	**22**
Acute cyanosis	0	0	0
Gasping	2	2	2
Respiratory rate >40 or <6/min	11	11	11
Intubation/ventilation not related to anesthesia	15	15	15
Oxygen saturation <90% for >60 minutes	8	8	8
PaO2/FiO2 <200 mmHg [a]	0	0	✖
Renal dysfunction	**9**	**9**	**9**
Oliguria non responsive to fluids or diuretics	6	6	6
Dialysis for acute renal failure [a]	1	1	✖
Creatinine ≥300µmol/l or ≥3.5 mg/dl	4	4	4
Coagulation/hematological dysfunction	**29**	**42**	**119**
Failure to form clots	4	4	4
Transfusion of .. units of blood or red cells	15[b]	31[c]	112[d]
Severe acute thrombocytopenia (<50.000/ml)	17	17	17
Hepatic dysfunction	**2**	**2**	**0**
Jaundice in the presence of pre-eclampsia	0	0	0
Bilirubin >100 µmol/l or > 6.0 mg/dl [a]	2	2	✖
Neurological dysfunction	**13**	**13**	**13**
Loss of consciousness lasting more than 12 h	10	10	10
Loss of consciousness, glucose/ketoacids in urine	1	1	1
Stroke	2	2	2
Uncontrollable fits / total paralysis	6	6	6
Uterine dysfunction	**4**	**4**	**4**
Hysterectomy following infection or hemorrhage	4	4	4
Additional parameters	**✖**	**47**	**176**
Eclampsia [e]	✖	44	44
Ruptured uterus [e]	✖	1	1
Sepsis or severe systemic infection [f]	✖	✖	40
Pulmonary edema [f]	✖	✖	13
Severe complications of abortion [f]	✖	✖	21
Severe malaria [f]	✖	✖	0
Severe pre-eclampsia with ICU admission [f]	✖	✖	103
Laparotomy other than for CS [f]	✖	✖	6
Laparotomy other than for CS or ectopic pregnancy [g]	✖	2	✖

Legend
[a] Criterion excluded by SSA-tool; [b] Five blood products; [c] Four blood products; [d] Two blood products; [e] Criterion added by Namibian and SSA-tools; [f] Criterion added by SSA-tool; [g] Criterion added by Namibian-tool; ✖ Not a criterion according to the specified tool

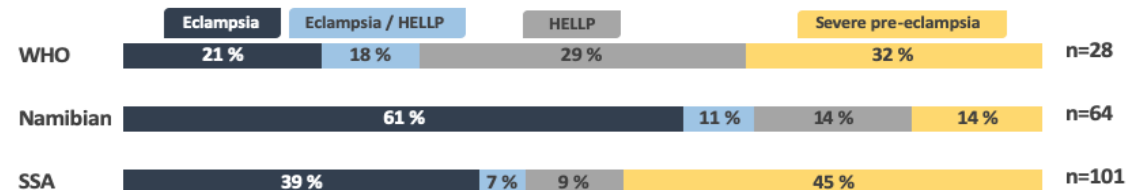**Figure S1** Underlying causes of MNM for the different tools, number of events
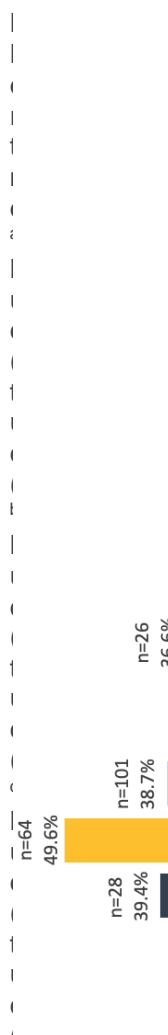
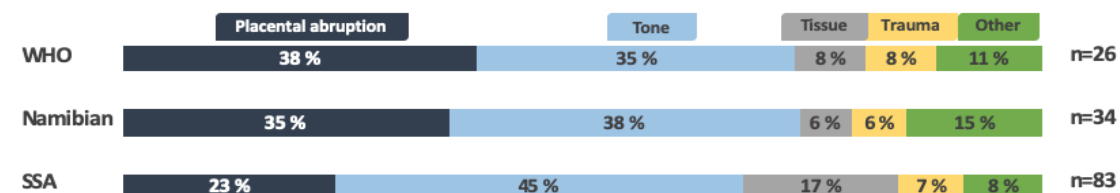**Figure S2** Distribution of the underlying causes and differences between the MNM criteria, number of events
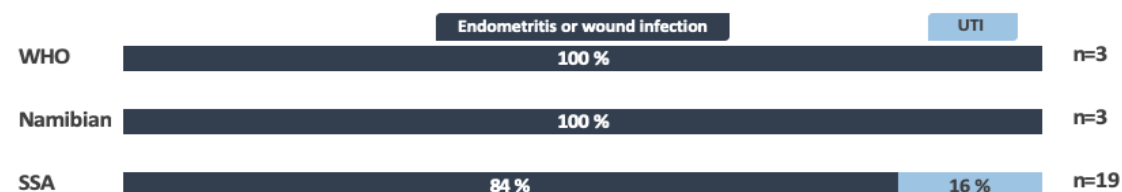
Pregnancy with abortive outcome

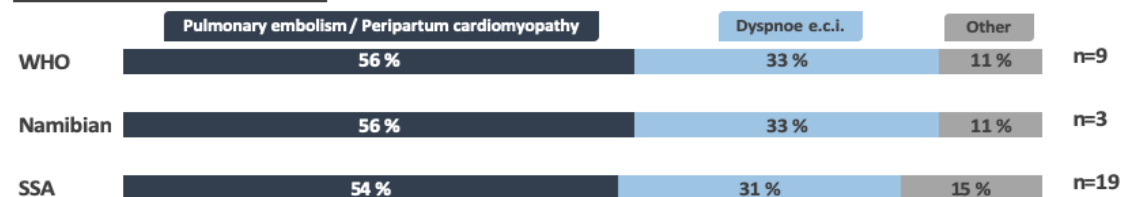|	Hemorrhage	Septic	Ectopic	Molar	Other	
WHO	33 %	33 %	11 %	11 %	11 %	n=9
Namibian	46 %	23 %	15 %	8 %	8 %	n=15
SSA	48 %	24 %	12 %	4 %	12 %	n=25

Hypertensive disorders

	Eclampsia	Eclampsia / HELLP	HELLP	Severe pre-eclampsia	
WHO	21 %	18 %	29 %	32 %	n=28
Namibian	61 %	11 %	14 %	14 %	n=64
SSA	39 %	7 %	9 %	45 %	n=101

Obstetric hemorrhage

	Placental abruption	Tone	Tissue	Trauma	Other	
WHO	38 %	35 %	8 %	8 %	11 %	n=26
Namibian	35 %	38 %	6 %	6 %	15 %	n=34
SSA	23 %	45 %	17 %	7 %	8 %	n=83

Infection, pregnancy-related

	Endometritis or wound infection	UTI	
WHO	100 %		n=3
Namibian	100 %		n=3
SSA	84 %	16 %	n=19

Other obstetric complications

	Pulmonary embolism / Peripartum cardiomyopathy	Dyspnoe e.c.i.	Other	
WHO	56 %	33 %	11 %	n=9
Namibian	56 %	33 %	11 %	n=3
SSA	54 %	31 %	15 %	n=19

Unanticipated complication of management

	Anesthesia complication	Medication overdosis	
WHO	100 %		n=1
Namibian	100 %		n=1
SSA	50 %	50 %	n=2
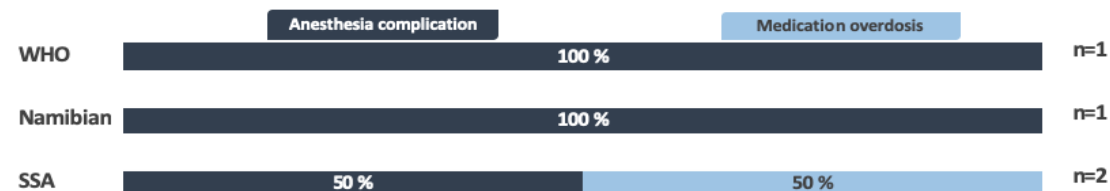
Indirect, non-obstetric complications

	Infection, non-puerperal	Complicated sickle cell crisis	Other	
WHO	20 %	40 %	20 %	n=5
Namibian	20 %	60 %	20 %	n=5
SSA	39 %	33 %	28 %	n=18
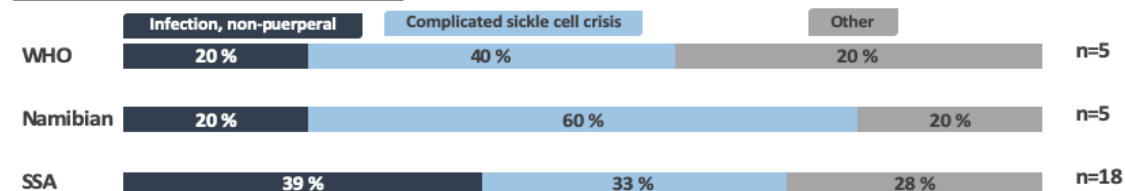
Table S3 Association between Namibian maternal near-miss and maternal characteristics and perinatal outcomes (MNM n=98, no MNM n=9082)

Maternal characteristics										
	MNM[1]	No MNM	cOR	95% CI		p-value	aOR	95% CI		p-value
Teenage pregnancy	13 / 98 (13.3%)	1201 / 8989 (13.4%)	0.99	0.55	1.78	0.978				
Old maternal age > 35yrs	20 / 97 (20.6%)	1275 / 8980 (14.2%)	1.57	0.96	2.58	0.075				
Maroon ethnicity	43 / 97 (44.3%)	2592 / 9041 (28.7%)	1.98	1.32	2.97	**0.001**	1.93	1.25	2.99	**0.003**
Nullipara	39 / 98 (39.8%)	3110 / 9050 (34.4%)	1.26	0.84	1.90	0.261				

Grande multipara (≥ 4)	22 / 98 (22.4%)	1197 / 9050 (13.2%)	1.90	1.18	3.06	**0.009**	1.47	0.86	2.53	0.162
Multiple pregnancy	1 / 98 (1.0%)	120 / 9082 (1.3%)	0.77	0.11	5.57	0.796				

Perinatal outcomes

	MNM[2]	No MNM	cOR	95% CI		p-value	aOR	95% CI		p-value
Low birth weight (<2500 g)	48 / 94 (51.1%)	1278 / 9037 (14.1%)	6.34	4.21	9.53	**<0.001**	1.34[3]	0.67	2.67	0.41
Preterm birth (GA <37w)	53 / 98 (54.1%)	1248 / 9082 (13.7%)	7.39	4.95	11.05	**<0.001**	**2.25**[4]	**1.11**	**4.56**	**0.025**
Low Apgar 5 min below 7	9 / 78 (11.5%)	224 / 8815 (2.5%)	5.00	2.47	10.15	**<0.001**	1.91[5]	0.83	4.39	0.128
Late stillbirth (GA>28w)	15 / 98 (15.3%)	107 / 9082 (1.2%)	15.2	8.5	27.1	**<0.001**	**4.74**[5]	**2.34**	**9.62**	**<0.001**

Legend
[1] MNM is the dependent variable
[2] MNM is the independent variable
[3] Adjusted for age, parity ethnicity, gestational age, Apgar score and stillbirth
[4] Adjusted for age, parity ethnicity, birth weight, Apgar score and stillbirth
[5] Adjusted for age, parity, ethnicity, gestational age and birth weight
GA: gestational age

Table S4 Association between Sub-Sahara African maternal near-miss and maternal characteristics and perinatal outcomes (MNM n=209, no MNM n=8971)

Maternal characteristics										
	MNM[1]	No MNM	cOR	95% CI		p-value	aOR	95% CI		p-value
Teenage pregnancy	23 / 208 (11.1%)	1191 / 8879 (13.4%)	0.80	0.52	1.24	0.324				
Old maternal age > 35yrs	45 / 207 (21.7%)	1250 / 8870 (14.1%)	**1.69**	**1.21**	**2.37**	**0.002**	**1.50**	**1.03**	**2.20**	**0.036**
Maroon ethnicity	76 / 208 (36.5%)	2559 / 8930 (28.7%)	**1.43**	**1.08**	**1.91**	**0.014**	**1.42**	**1.04**	**1.94**	**0.027**
Nullipara	74 / 208 (35.6%)	2075 / 8940 (34.4%)	1.05	0.79	1.40	0.723				
Grande multipara (≥ 4)	43 / 208 (20.7%)	1176 / 8940 (13.2%)	**1.72**	**1.22**	**2.42**	**0.002**	1.36	0.93	1.99	0.113
Multiple pregnancy	9 / 209 (4.3%)	112 / 8971 (1.2%)	**3.56**	**1.78**	**7.12**	**<0.001**	**3.38**	**1.68**	**6.81**	**0.001**
Perinatal outcomes										
	MNM[2]	No MNM	cOR	95% CI		p-value	aOR	95% CI		p-value
Low birth weight (<2500 g)	92 / 202 (45.5%)	1234 / 8929 (13.8%)	**5.22**	**3.93**	**6.92**	**<0.001**	1.45[3]	0.92	2.92	0.114
Preterm birth (GA <37w)	101 / 209 (48.3%)	1200 / 8971 (13.4%)	**6.06**	**4.59**	**8.00**	**<0.001**	2.57[4]	**1.62**	**4.11**	**<0.001**
Low Apgar 5 min below 7	20 / 172 (11.6%)	213 / 8721 (2.4%)	**5.26**	**3.23**	**8.54**	**<0.001**	2.41[5]	**1.36**	**4.30**	**0.003**
Late stillbirth (GA>28w)	23 / 209 (11.0%)	99 / 8971 (1.1%)	**11.08**	**6.88**	**17.84**	**<0.001**	3.98[5]	**2.24**	**7.06**	**<0.001**

Legend
[1] MNM is the dependent variable
[2] MNM is the independent variable
[3] Adjusted for age, parity ethnicity, gestational age, Apgar score and stillbirth
[4] Adjusted for age, parity ethnicity, birth weight, Apgar score and stillbirth
[5] Adjusted for age, parity, ethnicity, gestational age and birth weight
GA: gestational age