Te mate pēpi | Perinatal mortality

Contributory factors

Local review of cases showed there were a number of deaths that had potentially avoidable aspects. Contributory factors were thought to be present in just under one third of perinatal related deaths (excluding termination of pregnancy) (Table 3.35).

Table 3.35: Contributory factors and potentially avoidable perinatal related deaths 2017

	Fetal deaths				Neonatal deaths		Perinatal related deaths (total)	
	Termination of pregnancy		Stillbirths					
	n=133		n=287		n=171		n=591	
	n	%	n	%	n	%	n	%
Contributory factors								
Present	8	6.0	90	31.4	51	29.8	149	25.2
Absent	124	93.2	194	67.6	114	66.7	432	73.1
Missing data	<3	x	3	1.0	6	3.5	10	1.7
Potentially avoidable								
Yes	<3	x	52	18.1	25	14.6	78	13.2
Contributory factors present but not potentially avoidable	7	5.3	36	12.5	26	15.2	69	11.7
Contributory factors present but avoidability unknown	-	-	<3	x	-	-	<3	x

'x' indicates percentage suppressed due to small numbers.

Source: PMMRC's perinatal data extract 2017, local review data.

Contributory factors were characterised by organisational and/or management factors, personnel factors, and barriers to access. Of these, 'barriers to access and/or engagement with care' was the most common contributory factor cited (Table 3.36).

Table 3.36: Details of contributory factors among perinatal related deaths 2009–2017

| Contributory factors | 2009–2017 | |
	n	%
Any contributory factor	1,539	26.5
Organisational and/or management factors	296	5.1
Personnel factors	472	8.1
Barriers to access and/or engagement with care	1,105	19.0

Source: PMMRC's perinatal data extract 2009–2017, local review data.

Barriers to care was most notable for perinatal infection, maternal conditions and situations where there was no obstetric antecedent. Personnel factors were more common in hypertension, hypoxic peripartum death and fetal growth restriction (Figure 3.25 and Table 3.37).

Extracted from the full report at: www.hqsc.govt.nz/our-programmes/mrc/pmmrc/publications-and-resources/publication/3832

Figure 3.25: Main contributory factor(s) in potentially avoidable perinatal related deaths (as a percentage of all deaths in each PSANZ-PDC category) by perinatal death classification (PSANZ-PDC) 2013–2017*
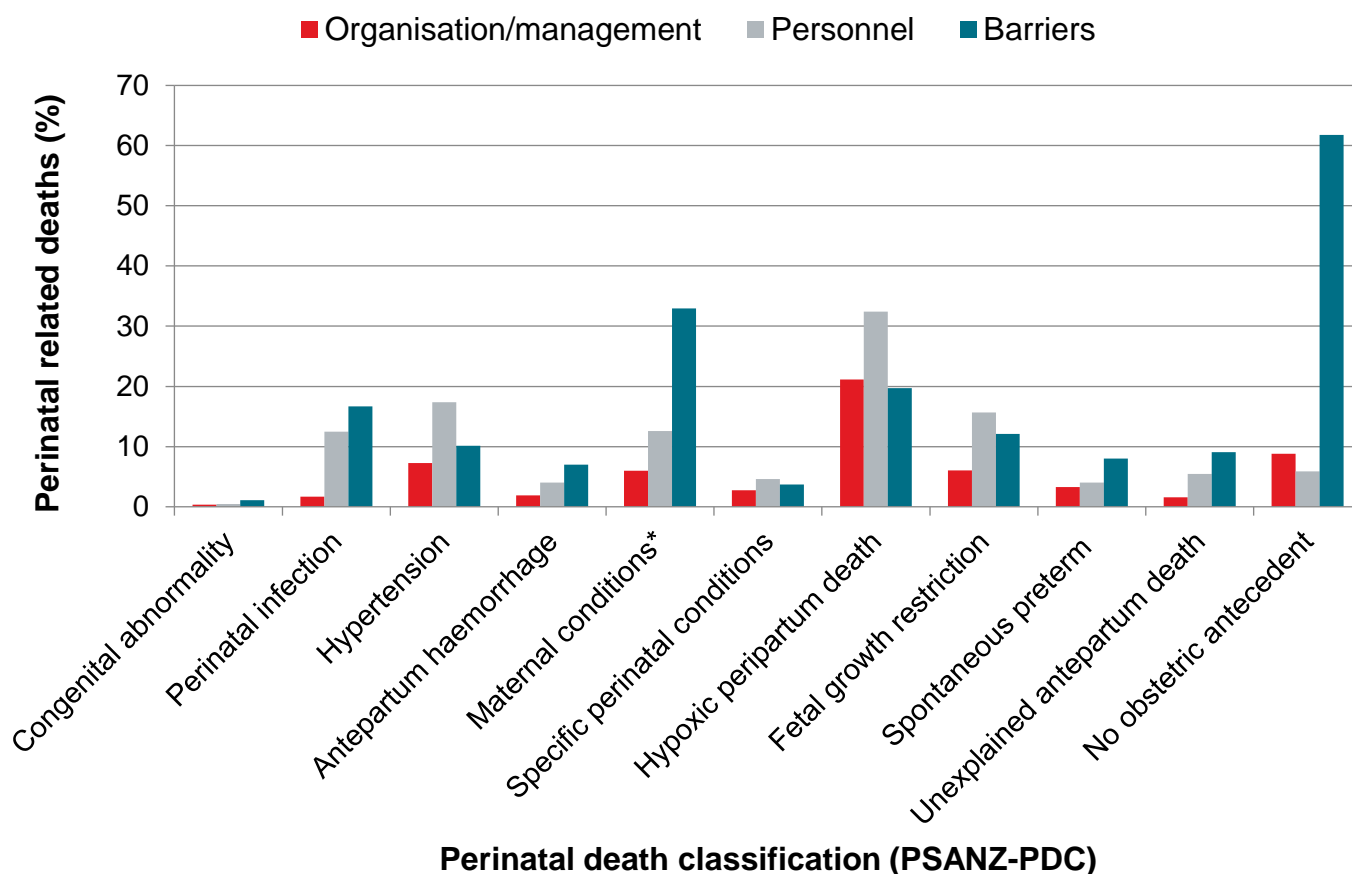
* Excludes two deaths where specific contributory factors were not identified.

Source: PMMRC's perinatal data extract 2013–2017, local review data.

Table 3.37: Main contributory factor(s) in potentially avoidable perinatal related death by perinatal death classification (PSANZ-PDC) 2013–2017

| Perinatal death classification (PSANZ-PDC) | Perinatal related deaths | Potentially avoidable | | | | | |
| | | Organisation/management | | Personnel | | Barriers | |
	n	n	%	n	%	n	%
Congenital abnormality	838	3	0.4	4	0.5	9	1.1
Perinatal infection	120	<3	x	15	12.5	20	16.7
Hypertension	69	5	7.2	12	17.4	7	10.1
Antepartum haemorrhage	373	7	1.9	15	4.0	26	7.0
Maternal conditions*	167	10	6.0	21	12.6	55	32.9
Specific perinatal conditions	326	9	2.8	15	4.6	12	3.7
Hypoxic peripartum death	71	15	21.1	23	32.4	14	19.7
Fetal growth restriction	198	12	6.1	31	15.7	24	12.1
Spontaneous preterm	400	13	3.3	16	4.0	32	8.0
Unexplained antepartum death	442	7	1.6	24	5.4	40	9.0
No obstetric antecedent	34	3	8.8	<3	x	21	61.8

* Excludes two deaths where specific contributory factors were not identified.

'x' indicates percentage suppressed due to small numbers.

Source: PMMRC's perinatal data extract 2013–2017, local review data.

Extracted from the full report at: www.hqsc.govt.nz/our-programmes/mrc/pmmrc/publications-and-resources/publication/3832

Organisational or management barriers were frequent amongst Māori and Pacific mothers, with personnel being a significant factor for those in Asian and MELAA ethnic groups (Figure 3.26 and Table 3.38).

Figure 3.26: Main contributory factor(s) in potentially avoidable perinatal related deaths (as a percentage of all deaths) by maternal prioritised ethnic group 2013–2017
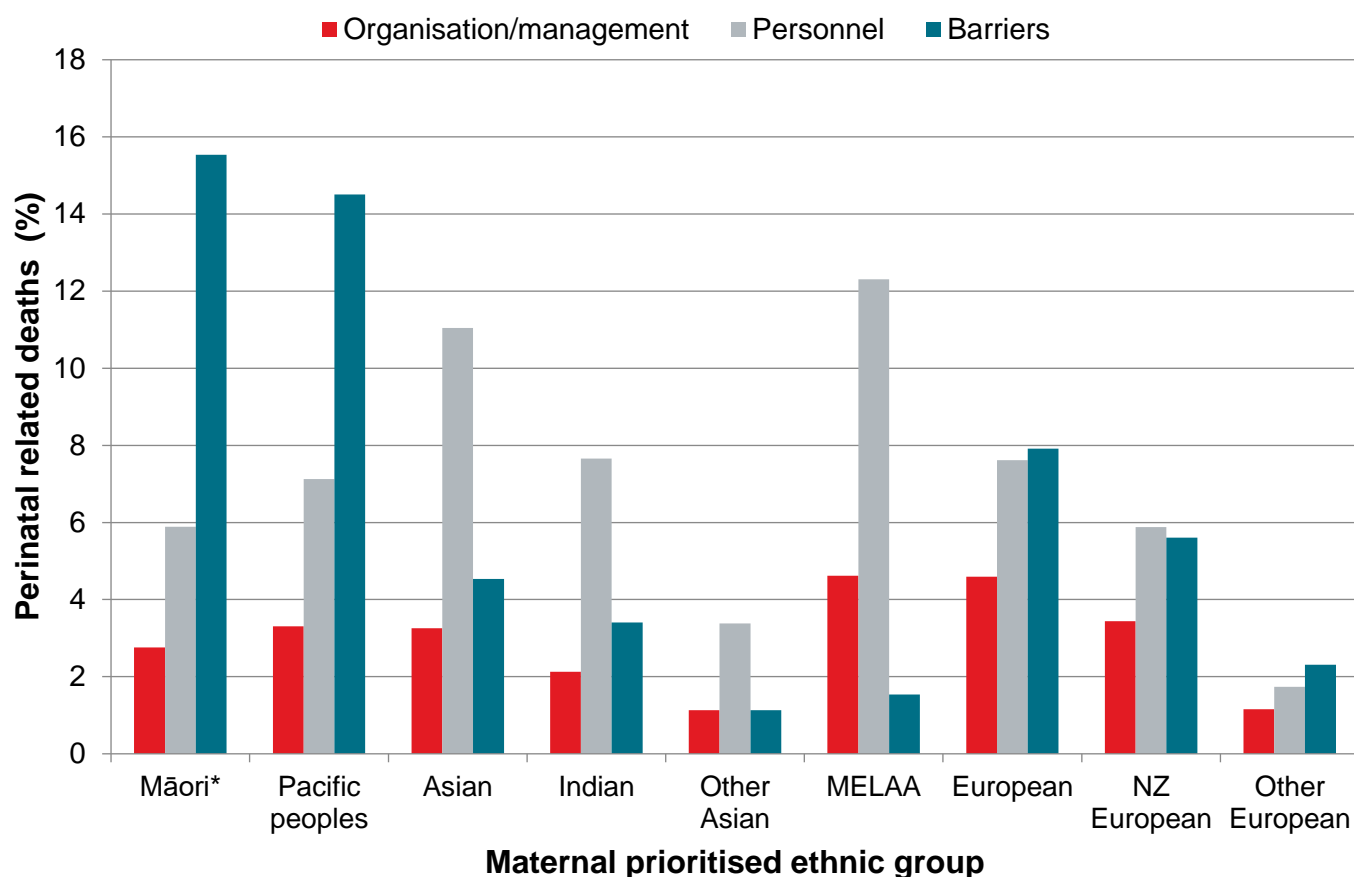
* Excludes one death where specific contributory factors were not identified.

MELAA = Middle Eastern, Latin American, or African.

Source: PMMRC's perinatal data extract 2013–2017, local review data.

Table 3.38: Main contributory factor(s) in potentially avoidable perinatal related deaths by maternal prioritised ethnic group* (with 95% CIs) 2013–2017

| Maternal prioritised ethnic group | Perinatal related deaths | Potentially avoidable | | | | | |
| | | Organisation/management | | Personnel | | Barriers | |
	n	n	%	n	%	n	%
Māori#	798	22	2.8	47	5.9	124	15.5
Pacific peoples	393	13	3.3	28	7.1	57	14.5
Asian	501	8	1.6	27	5.4	11	2.2
Indian	235	5	2.1	18	7.7	8	3.4
Other Asian	266	3	1.1	9	3.4	3	1.1
MELAA	65	3	4.6	8	12.3	<3	x
European	1,279	40	3.1	68	5.3	66	5.2
NZ European	1,106	38	3.4	65	5.9	62	5.6
Other European	173	<3	x	3	1.7	4	2.3

* Excludes two unknown maternal ethnicity perinatal related deaths (total).

Excludes one death where specific contributory factors were not identified.

'x' indicates percentage suppressed due to small numbers.

Source: PMMRC's perinatal data extract 2013–2017, local review data.

Extracted from the full report at: www.hqsc.govt.nz/our-programmes/mrc/pmmrc/publications-and-resources/publication/3832

As the level of deprivation increased, barriers to accessing care became more significant, particularly in NZDep2013 quintile 5 (Figure 3.27 and Table 3.39).

Figure 3.27: Main contributory factor(s) in potentially avoidable perinatal related deaths (as a percentage of all deaths) by NZDep2013 quintile 2013–2017
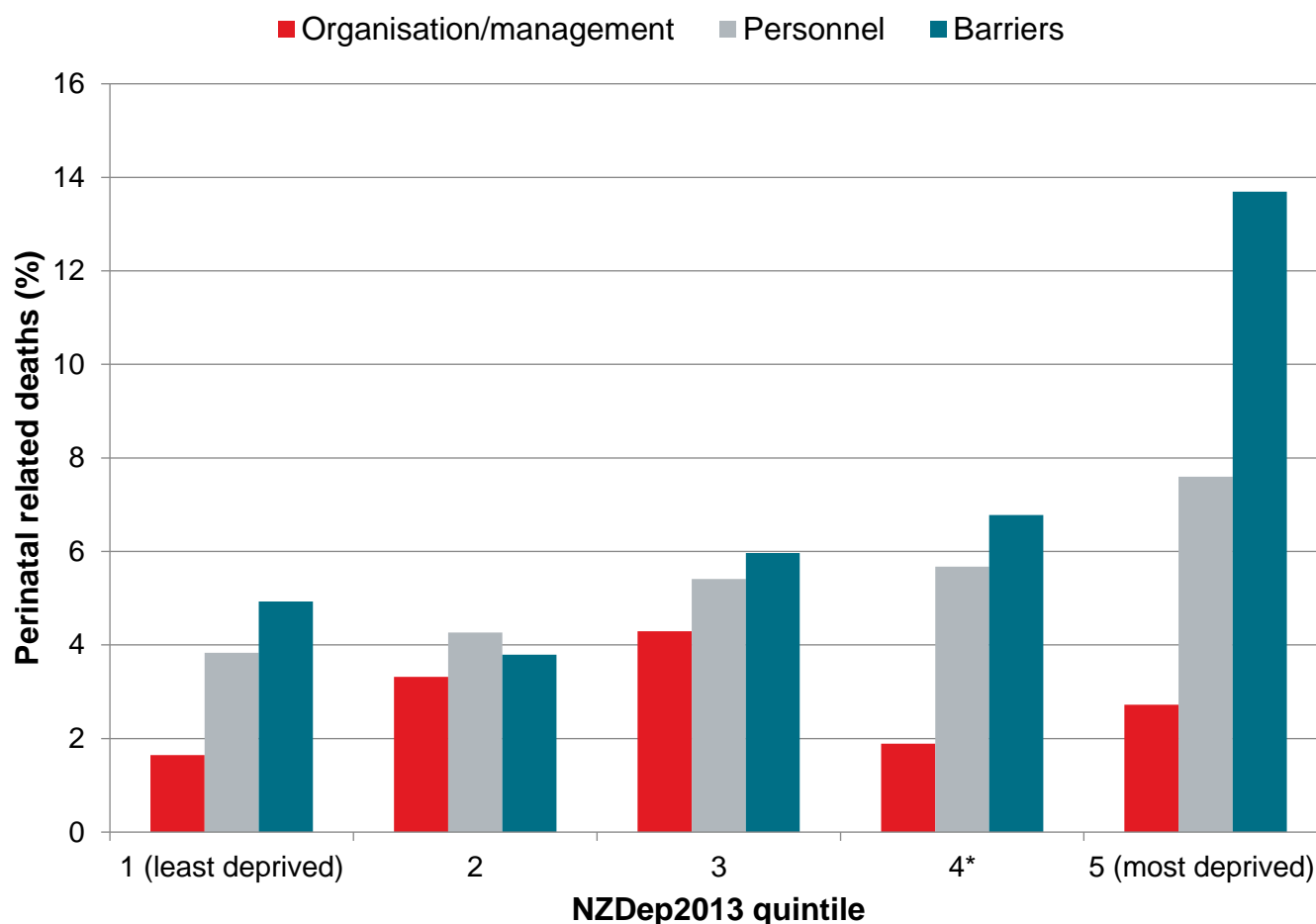
* Excludes two deaths where specific contributory factors were not identified.

Source: PMMRC's perinatal data extract 2013–2017, local review data.

Table 3.39: Main contributory factor(s) in potentially avoidable perinatal related deaths by NZDep2013 quintile (with 95% CIs) 2013–2017

| NZDep2013 quintile | Perinatal related deaths | Potentially avoidable | | | | | |
| | | Organisation/management | | Personnel | | Barriers | |
	n	n	%	n	%	n	%
1 (least deprived)	365	6	1.6	14	3.8	18	4.9
2	422	14	3.3	18	4.3	16	3.8
3	536	23	4.3	29	5.4	32	6.0
4*	634	12	1.9	36	5.7	43	6.8
5 (most deprived)	1,066	29	2.7	81	7.6	146	13.7
Unknown	15	<3	x	-	-	5	33.3

* Excludes one death where specific contributory factors were not identified.

'x' indicates percentage suppressed due to small numbers.

Source: PMMRC's perinatal data extract 2008–2017, local review data.