

**Supplementary table 1** – Nature of the different healthcare services provided to the study participants in the three year periods before and after the Utøya attack (total number of services: 19,208).

	Primary healthcare		Specialized mental healthcare		Specialized somatic healthcare	
	before (n=5,675)	after (n=7,702)	before (n=578)	after (n=1,501)	before (n=1,836)	after (n=1,916)
outpatient, consultations	3130 (55.2)	4082 (53.0)	531 (91.9)	1374 (91.5)	1631 (88.8)	1694 (88.4)
outpatient, other services <sup>a</sup>	2545 (44.8)	3620 (47.0)	31 (5.4)	112 (7.5)	67 (3.6)	97 (5.1)
inpatient, admissions <sup>b</sup>	-	-	16 (2.8)	15 (1.0)	138 (7.5)	125 (6.5)

<sup>a</sup> telephone consultations, mail correspondence etc.

<sup>b</sup> mean duration of admissions, pre- and post-disaster - specialized mental healthcare – 10.7 days (SD 9.2) and 15.1 days (SD 17.2) - specialized somatic healthcare - 5.4 days (SD 7.6) and 4.60 days (SD 6.9).

**Supplementary table 2** – Incomplete entries (missing patient ID) in the Norwegian Patient Registry<sup>1</sup>

a) Specialized mental healthcare services

year	missing ID (%)
2008	5.80 %
2009	4.79 %
2010	0.78 %
2011	0.49 %
2012	0.53 %
2013	0.30 %
2014	0.25 %

b) Specialized somatic healthcare services

year	missing ID (%)
2008	4.89 %
2009	3.31 %
2010	2.19 %
2011	2.18 %
2012	1.66 %
2013	1.32 %
2014	1.22 %

<sup>1</sup> Source: the Norwegian Patient Registry.

**Supplementary table 3** – Observed rates of healthcare service consumption in the three-year periods before and after the terrorist attack, annualized values. Supplement to Figure 2.

	mothers (n=222)			Fathers (n=136)		
	primary	mental	somatic	primary	mental	somatic
<b>Before</b> (all services   consultations only)						
2008-Jul-22 to 2009-Jan-21	5.41   3.33	0.34   0.34	2.12   2.05	3.79   2.24	0.24   0.22	1.21   1.16
2009-Jan-22 to 2009-Jul-21	5.98   3.05	0.41   0.39	1.49   1.46	3.57   1.93	0.19   0.19	0.87   0.72
2009-Jul-22 to 2010-Jan-21	5.60   3.13	0.49   0.48	1.19   1.17	4.25   2.35	0.46   0.34	1.72   1.69
2010-Jan-22 to 2010-Jul-21	6.08   3.14	0.47   0.44	1.76   1.64	4.10   2.46	0.87   0.87	2.00   1.97
2010-Jul-22 to 2011-Jan-21	6.19   3.35	0.47   0.43	1.46   1.38	4.97   2.91	1.06   1.04	1.72   1.66
2011-Jan-22 to 2011-Jul-21	6.13   3.17	0.72   0.64	1.49   1.40	5.00   2.85	0.74   0.71	1.96   1.94
<b>After</b> (all services   consultations only)						
<i>early aftermath</i>						
2011-Jul-22 to 2011-Aug-21	18.65   7.62	1.57   1.35	0.97   0.97	9.26   4.59	1.06   0.97	0.97   0.97
2011-Aug-22 to 2011-Sep-21	14.65   7.57	3.46   3.03	1.89   1.84	7.15   3.88	0.79   0.79	1.59   1.50
2011-Sep-22 to 2011-Oct-21	9.62   4.92	3.35   3.19	1.68   1.62	5.91   3.09	0.62   0.62	1.85   1.85
2011-Oct-22 to 2011-Nov-21	9.57   5.19	3.51   3.30	1.41   1.41	7.15   3.88	0.44   0.44	2.74   2.74
2011-Nov-22 to 2011-Dec-21	9.51   5.03	4.00   3.78	1.62   1.62	6.62   3.26	0.62   0.62	1.68   1.68
2011-Dec-22 to 2012-Jan-21	7.24   3.68	3.30   2.97	1.03   0.86	6.44   3.79	0.62   0.62	2.03   1.85
<i>delayed aftermath</i>						
2012-Jan-22 to 2012-Jul-21	7.89   3.86	2.17   1.95	1.35   1.32	5.21   3.00	0.68   0.63	1.38   1.29
2012-Jul-22 to 2013-Jan-21	7.67   4.25	1.53   1.43	2.09   2.01	5.32   3.31	0.68   0.63	1.26   1.22
2013-Jan-22 to 2013-Jul-21	7.05   3.64	1.76   1.68	1.82   1.71	4.78   2.72	0.63   0.53	1.62   1.51
2013-Jul-22 to 2014-Jan-21	7.52   4.10	1.32   1.24	1.95   1.86	5.26   3.04	0.69   0.59	1.50   1.38
2014-Jan-22 to 2014-Jul-21	7.60   3.80	0.88   0.83	1.6   1.43	5.16   2.87	0.76   0.71	2.04   1.87
<b>Summary</b> (all services   consultations only)						
Average before	5.90   3.20	0.48   0.45	1.58   1.52	4.28   2.46	0.59   0.56	1.58   1.52
Average after	8.21   4.22	1.81   1.68	1.71   1.62	5.47   3.12	0.69   0.63	1.60   1.51

primary: primary healthcare, mental: specialized mental healthcare, somatic: specialized somatic healthcare

**Supplementary table 4** – Rate ratios of parents’ post- versus pre-disaster healthcare consumption, in terms of (a) predictions of frequency of healthcare service consumption (age-adjusted negative binomial hurdle regression) and (b) proportions of individuals provided for (mean semiannual values). Confidence intervals (95%) of the rate ratios were generated through bootstrap replications. Supplement to Figure 3.

	mothers (n=222)				fathers (n=136)			
	all services		consultations only		all services		consultations only	
	estimate	ratio, after/before (95% CI)	estimate	ratio, after/before (95% CI)	estimate	ratio, after/before (95% CI)	estimate	ratio, after/before (95% CI)

**a) services**

primary	<i>before</i>	5.92		3.21		0.71		0.66	
	after - early	11.65	1.97 (1.76 - 2.23)	5.71	1.78 (1.57 - 2.02)	0.54	1.73 (1.36 - 2.29)	0.52	1.57 (1.28 - 1.91)
	- delayed	7.57	1.28 (1.15 - 1.42)	3.97	1.24 (1.11 - 1.43)	0.76	1.20 (0.99 - 1.45)	0.68	1.26 (1.05 - 1.52)
	- overall	8.26	1.40 (1.27 - 1.54)	4.26	1.33 (1.20 - 1.50)	0.73	1.29 (1.07 - 1.55)	0.66	1.31 (1.10 - 1.55)
mental	<i>before</i>	0.46		0.43		0.71		0.66	
	after - early	3.25	7.00 (3.86 - 19.02)	2.98	6.88 (3.84 - 18.95)	0.54	0.77 <sup>a</sup>	0.52	0.78 <sup>a</sup>
	- delayed	1.48	3.20 (1.49 - 9.49)	1.38	3.19 (1.45 - 9.60)	0.76	1.07 <sup>a</sup>	0.68	1.03 <sup>a</sup>
	- overall	1.78	3.84 (1.95 - 11.21)	1.65	3.82 (1.94 - 11.18)	0.73	1.03 <sup>a</sup>	0.66	1.00 <sup>a</sup>
somatic	<i>before</i>	1.58		1.52		1.31		1.26	
	after - early	1.48	0.93 (0.74 - 1.20)	1.43	0.94 (0.75 - 1.21)	1.64	1.25 (0.77 - 2.18)	1.59	1.26 (0.75 - 2.19)
	- delayed	1.77	1.12 (0.86 - 1.44)	1.67	1.10 (0.84 - 1.44)	1.36	1.04 (0.75 - 1.51)	1.30	1.03 (0.73 - 1.48)
	- overall	1.72	1.09 (0.85 - 1.37)	1.63	1.08 (0.84 - 1.37)	1.41	1.07 (0.79 - 1.52)	1.35	1.07 (0.78 - 1.52)

**b) individuals**

primary	<i>before</i>	0.74		0.63		0.56		0.49	
	after - early	0.88	1.19 (1.13 - 1.25)	0.79	1.26 (1.17 - 1.34)	0.74	1.31 (1.16 - 1.48)	0.66	1.36 (1.18 - 1.57)
	- delayed	0.79	1.07 (1.03 - 1.11)	0.69	1.10 (1.04 - 1.16)	0.62	1.11 (1.02 - 1.21)	0.53	1.10 (0.99 - 1.21)
	- overall	0.80	1.09 (1.05 - 1.13)	0.70	1.12 (1.07 - 1.18)	0.64	1.14 (1.05 - 1.24)	0.55	1.14 (1.04 - 1.26)
mental	<i>before</i>	0.03		0.03		0.03		0.03	
	after - early	0.22	6.68 (3.86 - 12.00)	0.22	6.55 (3.78 - 11.65)	0.08	3.14 (1.33 - 6.86)	0.08	3.14 (1.35 - 6.86)
	- delayed	0.12	3.49 (2.00 - 6.38)	0.11	3.33 (1.90 - 6.12)	0.05	1.89 (0.84 - 3.96)	0.05	1.77 (0.73 - 3.60)
	- overall	0.13	4.02 (2.34 - 7.22)	0.13	3.86 (2.25 - 6.92)	0.05	2.10 (0.95 - 4.18)	0.05	2.00 (0.86 - 3.75)
somatic	<i>before</i>	0.35		0.34		0.28		0.27	
	after - early	0.34	0.98 (0.82 - 1.15)	0.34	0.99 (0.83 - 1.16)	0.28	1.01 (0.80 - 1.24)	0.27	1.00 (0.78 - 1.23)
	- delayed	0.34	0.99 (0.89 - 1.12)	0.34	0.99 (0.88 - 1.11)	0.30	1.08 (0.90 - 1.29)	0.30	1.08 (0.89 - 1.29)
	- overall	0.34	0.99 (0.89 - 1.11)	0.34	0.99 (0.88 - 1.10)	0.30	1.07 (0.91 - 1.26)	0.29	1.07 (0.90 - 1.26)

primary: primary healthcare, mental: specialized mental healthcare, somatic: specialized somatic healthcare.

<sup>a)</sup> Ratio could not be reliably bootstrapped in our model.

**Supplementary table 5** – Reasons for accessing primary healthcare services, according to ICPC-2, before and after the terrorist attack. Categories with incidence of < 0.2 services per person per year are pooled. Supplement to Figure 4.

	ICPC-2	mothers (n=222)			fathers (n=136)		
		before	early	delayed	before	early	delayed
Overall		5.90	11.54	7.56	4.28	7.09	5.15
General and unspecified	(A)	0.91	0.94	1.06	0.50	0.88	0.67
Digestive	(D)	0.22	0.19	0.31	0.26	0.10	0.29
Cardiovascular	(K)	0.29	0.29	0.51	0.55	0.76	0.65
Musculoskeletal	(L)	1.36	1.21	1.60	1.10	0.84	1.07
Psychological	(P)	0.80	6.47	1.63	0.36	2.50	0.83
Respiratory	(R)	0.62	0.86	0.74	0.45	0.76	0.39
Skin	(S)	0.26	0.14	0.28	0.25	0.28	0.38
Endocrine/Metabolic and Nutritional	(T)	0.32	0.26	0.37	0.34	0.57	0.36
Other		1.13	1.19	1.05	0.47	0.38	0.51