Correction: *Comparison of attitudes towards five end-of-life care interventions (active pain control, withdrawal of futile life-sustaining treatment, passive euthanasia, active euthanasia and physician-assisted suicide): a multicentred cross-sectional survey of Korean patients with cancer, their family caregivers, physicians and the general Korean population*

Yun YH, Kim K, Sim J, *et al*. Comparison of attitudes towards five end-of-life care interventions (active pain control, withdrawal of futile life-sustaining treatment, passive euthanasia, active euthanasia and physician-assisted suicide): a multicentred cross-sectional survey of Korean patients with cancer, their family caregivers, physicians and the general Korean population. *BMJ Open* 2018;8:e020519. doi: 10.1136/bmjopen-2017–020519.

This article was previously published with below errors.

In the October 2018 edition of the *BMJ Open* (2018;8:e020519), we published an article entitled "Comparison of attitudes towards five end-of-life care interventions (active pain control, withdrawal of futile life-sustaining treatment, passive euthanasia, active euthanasia and physician-assisted suicide): a multicentred cross-sectional survey of Korean patients with cancer, their family caregivers, physicians and the general Korean population". While recently extending that research, however, we discovered that 236 members of the general population were mistakenly to be duplicated by the investigating agency (World Research) and reported 1241 were reported rather than 1005. Here, we present corrections and discuss the relevant data. Please note that the changes do not impact the overall conclusions of the article.

In the ABSTRACT, the fourth, fifth, sixth and seventh sentences of the results paragraph (page 1) should be corrected to the following:

Multiple logistic regression showed that education (adjusted OR (aOR) 1.82, 95% CI 1.35 to 2.47), religion (aOR 1.29, 95% CI 1.02 to 1.63), caregiver role (aOR 1.56, 95% CI 1.23 to 1.96) and considering death as the ending of life (aOR 1.58, 95% CI 1.22 to 2.04) were associated with preference for active pain control. Attitudes towards death, including belief in being remembered (aOR 2.00, 95% CI 1.45 to 2.77) and feeling 'life was meaningful' (aOR 2.49, 95% CI 1.51 to 4.09) were both strong correlates of withdrawal of LST with the level of monthly income (aOR 1.89, 95% CI 1.50 to 2.39). Believing 'freedom from pain' negatively predicted preference for passive euthanasia (aOR 0.67, 95% CI 0.54 to 0.84). In addition, 'not being a burden to the family' was positively related to preferences for active euthanasia (aOR 1.58, 95% CI 1.34 to 1.85) and PAS (aOR 1.70, 95% CI 1.43 to 2.01).

In the MATERIALS AND METHODS section of the paper, the last sentence of page 2 should be corrected to the following:

Finally, 1005 participants from the general population provided their consent to participate.

In the MATERIALS AND METHODS section of the paper, the second sentence of page 3 should be corrected to the following:

Of those, 1005 agreed to participate.

In the RESULTS section of the paper, the first sentence of the first paragraph (page 3) should be corrected to the following:

In total, 3940 participants—1001 patients with cancer, 1006 family caregivers, 928 physicians and 1005 members of the general Korean public—were included in this study.

Table 1 Associations between sociodemographic factors and preference for mode of death

	Active Pain Control			Withdrawal of Futile LST			Passive Euthanasia			Active Euthanasia			Physician-Assisted Suicide		
	Positive	Negative	P value	Positive	Negative	P value	Positive	Negative	P value	Positive	Negative	P value	Positive	Negative	P value
Sex															
Male	1753 (91.5)	162 (8.5)	N.S.	1748 (91.3)	167 (8.7)	N.S.	1297 (67.7)	618 (32.3)	0.004	727 (38.0)	1189 (62.1)	N.S.	598 (31.2)	1318 (68.8)	N.S.
Female	1833 (90.6)	191 (9.4)		1838 (90.8)	186 (9.2)		1240 (61.3)	784 (38.7)		724 (35.8)	1300 (64.2)		576 (28.5)	1448 (71.5)	
Age															
<50	1937 (91.3)	184 (8.7)	N.S.	1952 (92.0)	169 (8.0)	N.S.	1411 (66.5)	711 (33.5)	N.S.	787 (37.1)	1335 (62.9)	N.S.	654 (30.8)	1467 (69.2)	N.S.
≧50	1650 (90.7)	169 (9.3)		1635 (89.9)	184 (10.1)		1127 (62.0)	692 (38.0)		665 (36.6)	1154 (63.4)		521 (28.6)	1298 (71.4)	
Education															
Middle school or less	369 (85.4)	63 (14.6)	0.001	368 (85.2)	64 (14.8)	N.S.	222 (51.4)	210 (48.6)	0.002	124 (28.7)	308 (71.3)	<0.001	106 (24.5)	326 (75.5)	0.006
High school or higher	3130 (91.9)	276 (8.1)		3126 (91.8)	280 (8.2)		2254 (66.2)	1152 (33.8)		1286 (37.7)	2120 (62.3)		1034 (30.4)	2372 (69.7)	
Religion															
No	1710 (90.1)	189 (9.9)	N.S.	1722 (90.7)	177 (9.3)	N.S.	1216 (64.1)	683 (36.0)	N.S.	726 (38.3)	1173 (61.8)	N.S.	600 (31.6)	1299 (68.4)	0.022
Yes	1876 (92.0)	164 (8.0)		1864 (91.4)	176 (8.6)		1320 (64.7)	720 (35.3)		724 (35.5)	1316 (64.5)		574 (28.1)	1466 (71.9)	
Monthly income															
<3000	921 (88.8)	116 (11.2)	<0.001	895 (86.3)	142 (13.7)	<0.001	580 (55.9)	457 (44.1)	<0.001	347 (33.5)	690 (66.5)	N.S.	281 (27.1)	756 (72.9)	N.S.
≧3000	2635 (91.8)	235 (8.2)		2664 (92.8)	206 (7.2)		1940 (67.6)	930 (32.4)		1092 (38.0)	1778 (62.0)		883 (30.8)	1987 (69.3)	
Health insurance															
National Health Insurance	3438 (91.0)	341 (9.0)	N.S.	3439 (91.0)	340 (9.0)	N.S.	2450 (64.8)	1329 (35.2)	N.S.	1395 (36.9)	2384 (63.1)	N.S.	1124 (29.7)	2655 (70.3)	N.S.
Medicaid	94 (90.4)	10 (9.6)		93 (89.4)	11 (10.6)		61 (58.7)	43 (41.3)		43 (41.4)	61 (58.6)		39 (37.5)	65 (62.5)	
Comorbidity															
No	2530 (92.0)	221 (8.0)	N.S.	2538 (92.3)	213 (7.7)	N.S.	1813 (65.9)	937 (34.1)	N.S.	1000 (36.4)	1750 (63.6)	N.S.	827 (30.1)	1924 (69.9)	N.S.
Yes	1057 (88.9)	132 (11.1)		1049 (88.2)	140 (11.8)		724 (60.9)	465 (39.1)		451 (38.0)	738 (62.0)		349 (29.2)	842 (70.8)	
Caregiver experience															
No	1720 (89.0)	213 (11.0)	0.001	1731 (89.6)	202 (10.4)	0.023	1262 (65.3)	670 (34.7)	0.038	751 (38.8)	1183 (61.2)	0.009	605 (31.3)	1328 (68.7)	0.037
Yes	1867 (93.0)	140 (7.0)		1856 (92.5)	151 (7.5)		1276 (63.6)	731 (36.4)		701 (34.9)	1306 (65.1)		569 (28.4)	1438 (71.6)	

P values were estimated from models using stepwise selection
LST, Life-sustaining treatment; N.S., Non-significant.
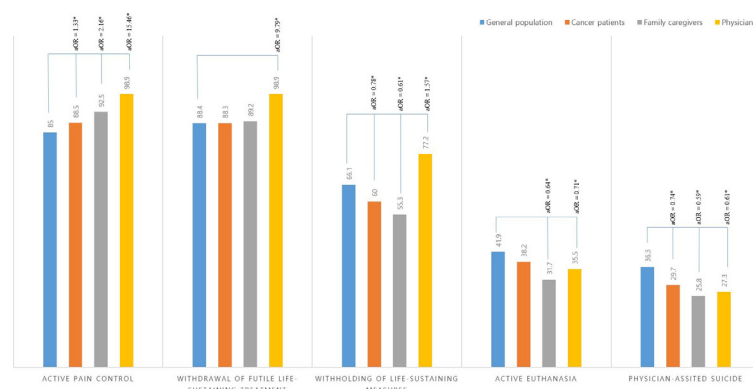
Figure 1 Proportion of respondents who preferred each mode of death by participant group. The number means the proportion (%) of respondents who preferred the specific end-of-life interventions. *P<0.05, estimated from logistic regression models adjusted for age, sex, education level, religion, monthly income, health insurance, comorbidity and caregiver experience.

Table 2 Associations between attitude toward death and preference for mode of death

	Active Pain Control			Withdrawal of Futile LST			Passive Euthanasia			Active Euthanasia			Physician-Assisted Suicide		
	Positive	Negative	P value	Positive	Negative	P value	Positive	Negative	P value	Positive	Negative	P value	Positive	Negative	P value
Life ends with death															
Negative	964 (88.9)	121 (11.1)	0.004	973 (89.7)	112 (10.3)	N.S.	660 (60.8)	425 (39.2)	N.S.	294 (27.1)	791 (72.9)	<0.001	229 (21.1)	856 (78.9)	<0.001
Positive	2623 (91.9)	232 (8.1)		2614 (91.6)	241 (8.5)		1878 (65.8)	977 (34.2)		1158 (40.6)	1697 (59.4)		946 (33.1)	1909 (66.9)	
Death is painful and therefore to be feared															
Negative	1566 (89.3)	187 (10.7)	0.009	1573 (89.7)	181 (10.3)	0.004	1107 (63.2)	646 (36.9)	0.004	589 (33.6)	1165 (66.4)	N.S.	467 (26.6)	1287 (73.4)	0.038
Positive	2021 (92.4)	165 (7.6)		2014 (92.1)	172 (7.9)		1430 (65.4)	756 (34.6)		863 (39.5)	1324 (60.5)		708 (32.4)	1478 (67.6)	
Life continues to remain intact ending of life															
Negative	1691 (89.8)	192 (10.2)	0.006	1712 (90.9)	171 (9.1)	N.S.	1207 (64.1)	676 (35.9)	N.S.	689 (36.6)	1194 (63.4)	0.022	549 (29.2)	1334 (70.8)	0.014
Positive	1897 (92.1)	161 (7.8)		1875 (91.1)	182 (8.9)		1331 (64.7)	727 (35.3)		763 (37.1)	1295 (62.9)		626 (30.4)	1432 (69.6)	
Dying people should prepare to practice charity															
Negative	333 (87.6)	47 (12.4)	0.024	323 (84.9)	57 (15.1)	0.012	227 (59.8)	153 (40.3)	N.S.	127 (33.3)	254 (66.7)	N.S.	105 (27.6)	275 (72.4)	N.S.
Positive	3254 (91.4)	305 (8.6)		3264 (91.7)	296 (8.3)		2310 (64.9)	1249 (35.1)		1325 (37.2)	2235 (62.8)		1070 (30.1)	2490 (70.0)	
People should be remembered															
Negative	298 (88.2)	40 (11.9)	N.S.	283 (83.7)	55 (16.3)	0.002	163 (48.2)	175 (51.9)	<0.001	112 (33.0)	227 (67.0)	N.S.	97 (28.6)	242 (71.4)	N.S.
Positive	3289 (91.3)	312 (8.7)		3304 (91.7)	298 (8.3)		2375 (65.9)	1227 (34.1)		1340 (37.2)	2262 (62.8)		1078 (20.0)	2524 (70.1)	

P values were estimated from models using stepwise selection.
LST, Life-sustaining treatment; N.S., Non-significant.

In the RESULTS section of the paper, the third paragraph (page 3) should be corrected to the following:

Table 1 shows the univariate logistic regression analyses of sociodemographic factors associated with preferences for five EoL interventions. From each model including sociodemographic variables, significant predictors differed. Higher education, higher income and caregiver experience were associated with a positive attitude for active pain control. Higher income and caregiver experience were associated with a positive preference for withdrawal of futile LST. Participants who preferred passive euthanasia were more likely to have higher levels of education

Table 3 Associations between factors related to well-dying and preference for mode of death

	Active Pain Control			Withdrawal of Futile LST			Passive Euthanasia			Active Euthanasia			Physician-Assisted Suicide		
	Positive	Negative	P value	Positive	Negative	P value	Positive	Negative	P value	Positive	Negative	P value	Positive	Negative	P value
Presence of family															
Negative	2704 (91.4)	254 (8.6)	N.S.	2713 (91.7)	244 (8.3)	0.031	1871 (63.3)	1087 (36.7)	N.S.	1105 (37.4)	1853 (62.6)	N.S.	903 (30.5)	2055 (69.5)	N.S.
Positive	884 (89.9)	99 (10.1)		874 (88.9)	109 (11.1)		667 (67.9)	316 (32.1)		347 (35.3)	636 (64.7)		272 (27.7)	710 (72.3)	
Not be a burden to family															
Negative	2792 (91.2)	269 (8.8)	N.S.	2798 (91.4)	262 (8.6)	N.S.	1959 (64.0)	1101 (36.0)	N.S.	1041 (34.0)	2019 (66.0)	<0.001	830 (27.1)	2230 (72.9)	<0.001
Positive	796 (90.4)	84 (9.6)		789 (89.6)	91 (10.4)		579 (65.8)	301 (34.2)		411 (46.7)	469 (53.3)		344 (39.1)	536 (60.9)	
Resolve unfinished business															
Negative	2953 (91.1)	289 (8.9)	N.S.	2948 (90.9)	294 (9.1)	N.S.	2113 (65.2)	1130 (34.9)	0.005	1204 (37.1)	2038 (62.9)	N.S.	976 (30.1)	2267 (69.9)	N.S.
Positive	634 (91.0)	63 (9.0)		639 (91.5)	59 (8.5)		425 (61.0)	272 (39.0)		247 (35.5)	450 (64.6)		199 (28.5)	499 (71.5)	
Feel life was meaningful															
Negative	3092 (90.6)	321 (9.4)	0.011	3080 (90.2)	333 (9.8)	<0.001	2172 (63.6)	1241 (36.4)	N.S.	1296 (38.0)	2117 (62.0)	0.019	1058 (31.0)	2355 (69.0)	0.0015
Positive	496 (94.0)	32 (6.0)		507 (96.2)	20 (3.8)		366 (69.4)	161 (30.6)		156 (29.6)	371 (70.4)		116 (22.1)	411 (77.9)	
Freedom from pain															
Negative	3215 (90.9)	322 (9.1)	N.S.	3217 (91.0)	319 (9.0)	N.S.	2316 (65.5)	1220 (34.5)	<0.001	1302 (36.8)	2234 (63.2)	N.S.	1042 (29.5)	2494 (70.5)	0.025
Positive	373 (92.4)	31 (7.6)		370 (91.6)	34 (8.4)		222 (54.9)	182 (45.1)		150 (37.1)	254 (62.9)		132 (32.8)	271 (67.2)	

P values were estimated from models using stepwise selection.
LST, Life-sustaining treatment; N.S., Non-significant.

Table 4 Multiple logistic regression models for factors considered important in preference for mode of deaths

	Active Pain Control		Withdrawal of Futile LST		Passive Euthanasia		Active Euthanasia		Physician-Assisted Suicide	
	aOR	95% CI	aOR	95% CI	aOR	95% CI	aOR	95% CI	aOR	95% CI
Sex										
Male					Ref	Ref			Ref	
Female					0.78	0.68 to 0.89			0.85	0.74 to 0.98
Age										
<50										
≧50										
Education										
Middle school or less	Ref	Ref			Ref	Ref	Ref	Ref	Ref	Ref
High school or higher	1.82	1.35 to 2.47			1.46	1.16 to 1.84	1.70	1.36 to 2.14	1.47	1.16 to 1.87
Religion										
No	Ref	Ref								
Yes	1.29	1.02 to 1.63								
Monthly income										
<3000			Ref	Ref	Ref	Ref				
≧3000			1.89	1.50 to 2.39	1.37	1.16 to 1.62				
Caregiver experience										
No	Ref	Ref	Ref	Ref			Ref	Ref		
Yes	1.56	1.23 to 1.96	1.39	1.10 to 1.75			0.86	0.75 to 0.98		
Life ends with death										
Negative	Ref	Ref			Ref	Ref	Ref	Ref	Ref	Ref
Positive	1.58	1.22 to 2.04			1.25	1.07 to 1.45	1.70	1.44 to 1.99	1.82	1.52 to 2.17
Death is painful and therefore to be feared										
Negative	Ref	Ref	Ref	Ref			Ref	Ref	Ref	Ref
Positive	1.34	1.06 to 1.69	1.43	1.14 to 1.79			1.18	1.02 to 1.35	1.17	1.00 to 1.35
Life continues to remain intact ending of life										
Negative	Ref	Ref							Ref	Ref
Positive	1.30	1.02 to 1.66							1.21	1.04 to 1.40
People should prepare to show mercy										
Negative	Ref	Ref								
Positive	1.39	1.01 to 1.93								
People should be remembered										
Negative			Ref	Ref	Ref	Ref				
Positive			2.00	1.45 to 2.77	1.97	1.56 to 2.48				
Presence of family										
Negative			Ref	Ref						
Positive			0.76	0.59 to 0.97						
Not be a burden to family										
Negative							Ref	Ref	Ref	Ref
Positive							1.58	1.34 to 1.85	1.70	1.43 to 2.01
Resolve unfinished business										
Negative					Ref	Ref				
Positive					0.83	0.70 to 0.99				
Feel life was meaningful										
Negative	Ref	Ref	Ref	Ref			Ref	Ref	Ref	Ref
Positive	1.58	1.07 to 2.33	2.49	1.51 to 4.09			0.76	0.62 to 0.94	0.73	0.58 to 0.92
Freedom from pain										
Negative					Ref	Ref			Ref	Ref
Positive					0.67	0.54 to 0.84			1.28	1.01 to 1.62

aOR, adjusted OR; LST, Life-sustaining treatment.

and income, whereas having had a caregiving role was negatively associated with preference for passive euthanasia. Similarly, education was associated with a positive attitude towards active euthanasia, whereas having had a caregiving role was negatively associated. A higher educational level was also associated with approval of PAS, as was the absence of religion and no caregiver experience.

Our original figure 1 (page 4), should be corrected to the following:

In the RESULTS section of the paper, the first sentence of the last paragraph (page 4) should be corrected to the following:

Preference for active pain control was positively associated with higher education, caregiver experience and positive attitudes towards death as the ending of life; furthermore, it was associated with feeling 'life was meaningful' as a component of a good death.

Our original table 1 (page 5), should be corrected to the following:

Our original table 2 (page 6), should be corrected to the following:

Our original table 3 (page 7), should be corrected to the following:

Our original table 4 (page 8), should be corrected to the following:

In the RESULTS section of the paper, the fourth and fifth sentences of the last paragraph (page 10) should be corrected to the following:

On the other hand, regarding 'freedom from pain' as an important factor of a good death negatively predicted a preference for passive euthanasia and PAS. Education level, two attitudes towards death (being the end of life and being feared) and not being a burden to one's family as a component of a good death were related to positive attitudes towards both active euthanasia and PAS (table 4).

In the discussion section, the second sentence of the sixth paragraph (page 10) should be corrected to the following:

It is understandable that participants 'fearing death because it is painful' are more likely to favour four EoL interventions.

In the discussion section, the seventh paragraph (page 11–12) should be corrected to the following:

This study also showed that attitudes towards death and towards 'a good death' were associated with the mode of death. Participants choosing 'presence of family' as a component of a good death were less likely to favour withdrawal of futile LST. Multiple regression modelling also confirmed the association of 'not to be a burden to family' with hastened death, such as active euthanasia and PAS. 50,51 Participants wanting to not be a burden to family at EoL were more likely to accept euthanasia and PAS. In other studies, fear of becoming dependent on the family, perceiving oneself as a financial burden to others and lacking social support were related to acceptance of a hastened death.50 51 Interestingly, our study also found that subjects 'feeling life was meaningful' were more likely to consider active pain control and withdrawal of futile LST but less likely to consider euthanasia or PAS, a finding similar to that of an earlier US study suggesting that 'feeling appreciated' was associated with being less likely to consider euthanasia or PAS.38

We wish to apologise to the publisher and readers of *BMJ Open* for these errors.

Check for updates