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Supplementary Data

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Appendix 1: Operation and activity of ‘Emergency Fund to Enhance Community-Based Suicide Countermeasure’ (EFECBSC).

‘Emergency Fund to Enhance Community-Based Suicide Countermeasure’ (EFECBSC) is composed of ten sub-divisions of regional support programmes of five independent prefectural and five municipal suicide prevention programmes [1-3]: Personal consultation support programme (PCS), telephone consultation support programme (TCS), development programme of leaders and listeners (DLL), enlightenment programme (ELM), and intervention model programme (IVM) [1-3].

Each municipality submitted its municipal suicide prevention programme (PSC, TCS, DLL, ELM and IVM) to its prefecture. Prefectures then submitted their prefectural programmes along with municipal programmes, to EFECBSC of CAO, which allocated funds to each prefecture, including budgets for prefectures and municipalities. These prefectural and municipal suicide prevention programmes were independent of each other [1-4].

PCS supports the development of a multidisciplinary support system and community support consultation sessions against economic problems (unemployment, bankruptcy and multiple debts) and health problems that are risk factors for suicide, as well as a system of broad collaboration between professionals such as "lawyers, psychiatrists, social workers, and public health nurses [1-4].

TCS supports the enhancement of the system required for telephone and internet support implemented by the prefecture, municipality and private organisations (sharing of telephone numbers, free 24-hour support, etc.) [1-4].

DLL organises workshops for human resources training to provide consultation support for persons at high risk of suicide, persons who have attempted suicide and bereaved family members (gatekeeper, leader, and listener) [1-4].

ELM provides financial support for public relations such as newspapers, television, radio, pamphlets, symposiums, lectures, etc. in order to raise awareness of social and public support for high-risk people [1-4].

IVM supports survey and support programmes against high-risk individuals independently implemented by prefectures and municipalities [1-4].

References

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Appendix 2: Effects of the execution amounts of EFECBSC sub-divisions on total (male plus female), male and female EBSMR trends of hanging, charcoal-burning and jumping suicides.

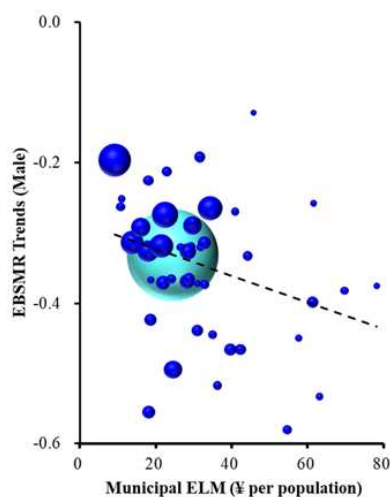
Total(male+female)	Adjusted R ²	F value	(degrees of freedom)	P value	Factor	β	t value	P	VIF	
hanging	0.375	13.203	(2,44)	0.01	Prefectural	ELM	-0.429	-3.549	0.01	1.03
					Municipal	DLL	-0.371	-3.066	0.01	1.03
charcoal-burning	0.124	6.345	(1,45)	0.05	Municipal	ELM	-0.352	-2.519	0.05	1.00
Jumping	0.173	4.587	(2,44)	0.05	Prefectural	TCS	-0.296	-2.156	0.05	1.00
					Prefectural	ELM	0.306	2.230	0.05	1.00
Male										
hanging	0.385	13.775	(2,44)	0.01	Prefectural	ELM	-0.460	-3.833	0.01	1.03
					Municipal	DLL	-0.347	-2.891	0.01	1.03
charcoal-burning	0.128	6.591	(1,45)	0.05	Municipal	DLL	-0.357	-2.567	0.05	1.00
Jumping	0.182	4.890	(2,44)	0.05	Prefectural	TCS	-0.299	-2.189	0.05	1.00
					Municipal	ELM	0.319	2.338	0.05	1.00
Female										
hanging	0.143	7.517	(1,45)	0.01	Municipal	PCS	-0.378	-2.742	0.01	1.00
charcoal-burning	0.263	7.862	(2,44)	0.01	Municipal	ELM	-0.437	-3.370	0.01	1.00
					Prefectural	TCS	0.292	2.253	0.05	1.00
Jumping	0.090	4.448	(1,45)	0.05	Municipal	PCS	0.300	2.109	0.05	1.00

Effects of execution amount of 10 EFECBSC sub-divisions on EBSMR trends of total, male and female were analysed by stepwise multiple regression analysis. Red painted sub-divisions of EFECBSC indicate the negative effects on prevention of suicide mortality.

DLL, development programme of leaders and listeners; EFECBSC, Emergency Fund to Enhance Community-Based Suicide Countermeasure; ELM, enlightenment programme; PCS, personal consultation support programme; TCS, telephone consultation support programme; VIF, variance inflation factor.

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Appendix 3: Effects of the execution amounts of municipal ELM of EFECBSC on EMSMR trends of male charcoal-burning suicide analysed by linear regression analysis.



Ordinates indicate EBSMR trends between 2009 and 2018, and abscissas indicate execution amount of municipal ELM of EFECBSC (per population). Light blue and deep blue spheres indicate national and prefectural male EBSMR trends and population sizes, respectively. Black line indicates the regression lines of significantly positive (reduced suicide mortality) factor.

Stepwise multiple regression analysis could not detect the significant/inversely relation between execution amounts of municipal ELM and male EBSMR trends of charcoal-burning suicide, whereas linear regression analysis revealed the significant inhibitory effects of execution amounts of municipal ELM on male EBSMR trends of charcoal-burning suicide.

Male EBSMR trends by charcoal-burning suicide = $-0.0188 \times (\text{municipal ELM}) - 0.2851$ ($R^2 = 0.0923$, $P < 0.05$) (¥53.1 million of municipal ELM decreased male charcoal-burning suicide suicides by 1/100,000 per year).