

Title: The Association of Sexual Frequency with Cardiovascular Diseases Incidence and All-Cause Mortality

Authors: Tian-Qi Teng^{1#}, Jing Liu ^{3#}, Meng-Meng Wang¹, De-Gang Mo¹ , Rui Chen¹ , Jia-Chao Xu¹ , Zi-Han Dong¹, Ning Zhang¹ , Hai-Chu Yu^{1,2*}

Explanation of covariates page 2-4

Table S1 page1-10

Homosexual behavior

For male

Have you ever had any kind of sex with a man, including oral or anal?

In your lifetime, with how many men have you had anal or oral sex?

For Female

Have you ever had any kind of sex with a woman? By sex, we mean sexual contact with another woman's vagina or genitals.

In your lifetime with how many women have you had sex? By sex, we mean sexual contact with another woman's vagina or genitals.

Exercise

Obtained from the Global Physical Activity Questionnaire (Schunaet al., 2013), the questionnaire includes questions related to different domains of physical activity such as transportation, occupation, and leisure time moderate-to-vigorous physical activity (MVPA).more than 150 min per week of moderate-intensity aerobic exercise or 75 min/week of vigorousintensity aerobic exercise or an equivalent combination of both moderate and vigorous exercise (1 min of vigorous-intensity exercise is equivalent to 2 min of moderate-intensity exercise) totaling at least 150 min per week was identified as vigorous/moderate exercise volume Similarly, light exercise volume was defined as less than 150 min per week of moderate-intensity aerobic exercise or equivalent status.

Medication use

1. **β-blockers:** (RXDDRGID and RXDDRUG): a11077 HYDROCHLOROTHIAZIDE; LABETALOL. c00047 BETA-ADRENERGIC BLOCKING AGENTS - UNSPECIFIED. d00004 ATENOLOL. d00016 LABETALOL. d00018 NADOLOL. d00134 METOPROLOL.

d00137 PINDOLOL. d00139 TIMOLOL. d00176 BETAXOLOL. d00332 PENBUTOLOL.
d00709 BISOPROLOL. d03258 ATENOLOL; CHLORTHALIDONE. d03259
BENDROFLUMETHIAZIDE; NADOLOL. d03260 HYDROCHLOROTHIAZIDE;
TIMOLOL. d03261 HYDROCHLOROTHIAZIDE; PROPRANOLOL. d03264
HYDROCHLOROTHIAZIDE; METOPROLOL. d03744 BISOPROLOL;
HYDROCHLOROTHIAZIDE. d03847 CARVEDILOL. d05265 NEBIVOLOL

2. **Contraceptives:** a11284 ETHINYL ESTRADIOL; FERROUS FUMARATE;
NORETHINDRONE. c00102 CONTRACEPTIVES - UNSPECIFIED. d00229 ETHINYL
ESTRADIOL. d00284 MEDROXYPROGESTERONE. d00555 NORETHINDRONE.
d00557 LEVONORGESTREL. d00709 BISOPROLOL. d03034 NORGESTREL. d03238
ETHINYL ESTRADIOL; NORETHINDRONE. d03240 MESTRANOL;
NORETHINDRONE. d03241 ETHINYL ESTRADIOL; NORGESTREL. d03242 ETHINYL
ESTRADIOL; LEVONORGESTREL. d03388 ETHINYL ESTRADIOL; ETHYNODIOL.
d03781 ETHINYL ESTRADIOL; NORGESTIMATE. d03782 DESOGESTREL; ETHINYL
ESTRADIOL. d03819 CONJUGATED ESTROGENS; MEDROXYPROGESTERONE.
d04375 ESTRADIOL; NORETHINDRONE. d04721 ESTRADIOL;
MEDROXYPROGESTERONE. d04760 DROSPIRENONE; ETHINYL ESTRADIOL.
d04772 ETONOGESTREL. d04773 ETHINYL ESTRADIOL; ETONOGESTREL. d04779
ETHINYL ESTRADIOL; NORELGESTROMIN. d04914 ESTRADIOL;
LEVONORGESTREL. d06272 DIENOGEST; ESTRADIOL.

3. **Erectile dysfunction agents:** d01386 YOHIMBINE. d01387 ALPROSTADIL. d04299
SILDENAFIL. d04893 VARDENAFIL. d04896 TADALAFIL.

Table S1. All subgroup analyses exploring the association between sexual frequency and CVD incidence and all-cause mortality

Subgroup	Risk of cardiovascular disease OR (95% CI)				All-cause mortality HR(%95CI)		
	Sexual frequency, times/year	OR(95%CI)	p-value	P for interaction	HR95%CI	p-value	P for interaction
Overall	0	1.61 (1.09, 2.37)	0.017**	-	2.36 (1.48, 3.78)	<0.001***	-
	1	1.58 (0.87, 2.88)	0.13		1.97 (1.03, 3.73)	0.039*	
	2-11	1.68 (1.14, 2.48)	0.01*		1.24 (0.76, 2.02)	0.4	
	12-51	1.13 (0.72, 1.77)	0.6		1.09 (0.65, 1.83)	0.7	
	52-103	Reference			Reference		
	104-364	1.56 (0.96, 2.51)	0.07*		1.4 (0.83, 2.38)	0.2	
	≥365	2.35 (1.03, 5.39)	0.044*		2.82 (1.28, 6.23)	0.01*	
Age,years, 20-30	0	4.96 (1.11, 22.1)	0.036*	0.014*	5.97 (1.76, 20.2)	0.004**	0.901
	1	6.45 (0.99, 42)	0.051		2.99 (0.46, 19.5)	0.3	
	2-11	2.68 (0.42, 17.3)	0.3		2.01 (0.53, 7.65)	0.3	
	12-51	0.25 (0.03, 1.92)	0.2		1.53 (0.43, 5.39)	0.5	
	52-103	Reference			Reference		
	104-364	0.55 (0.08, 3.83)	0.5		2.82 (0.8, 9.97)	0.11	
	≥365	4.57 (0.62, 33.5)	0.13		5.96 (1.01, 35.1)	0.049*	
Age, years, 31-43	0	0.74 (0.32, 1.71)	0.5		1.35 (0.63, 2.92)	0.4	
	1	0.9 (0.35, 2.33)	0.8		1.94 (0.75, 5.04)	0.2	
	2-11	0.85 (0.43, 1.71)	0.7		0.93 (0.41, 2.08)	0.9	
	12-51	0.59 (0.33, 1.07)	0.083		0.84 (0.37, 1.89)	0.7	
	52-103	Reference			Reference		
	104-364	0.94 (0.52, 1.69)	0.8		0.89 (0.39, 2.07)	0.8	

Table S1. All subgroup analyses exploring the association between sexual frequency and CVD incidence and all-cause mortality

Subgroup	Risk of cardiovascular disease OR (95% CI)			P for interaction	All-cause mortality HR(%95CI)		
	Sexual frequency, times/year	OR(95% CI)	p-value		HR95%CI	p-value	P for interaction
Age,years, 44-59	≥365	0.78 (0.22, 2.79)	0.7		1.79 (0.47, 6.85)	0.4	
	0	1.97 (1.21, 3.2)	0.007**		2.49 (1.41, 4.4)	0.002**	
	1	1.75 (0.88, 3.49)	0.11		1.94 (0.87, 4.34)	0.11	
	2-11	2.2 (1.37, 3.56)	0.002**		1.28 (0.71, 2.32)	0.4	
	12-51	1.68 (0.93, 3.04)	0.087		1.2 (0.65, 2.21)	0.6	
	52-103	Reference			Reference		
	104-364	2.34 (1.18, 4.67)	0.017*		1.43 (0.61, 3.32)	0.4	
	≥365	3.15 (0.88, 11.2)	0.076		2.3 (0.64, 8.34)	0.2	
Femal	0	1.79 (0.9, 3.6)	0.1	>0.9	2.95 (1.43, 6.08)	0.003**	0.986
	1	1.88 (0.81, 4.36)	0.14		2.14 (0.9, 5.14)	0.087	
	2-11	1.77 (0.95, 3.28)	0.071		1.55 (0.72, 3.34)	0.3	
	12-51	1.19 (0.62, 2.29)	0.6		1.22 (0.57, 2.63)	0.6	
	52-103	Reference			Reference		
	104-364	1.9 (0.92, 3.91)	0.081		1.72 (0.67, 4.38)	0.3	
	≥365	2.39 (0.57, 9.97)	0.2		3.61 (0.99, 13.2)	0.052	
Male	0	1.54 (0.86, 2.77)	0.15		2.01 (1.1, 3.68)	0.023*	
	1	1.38 (0.53, 3.61)	0.5		1.83 (0.82, 4.09)	0.14	
	2-11	1.59 (0.92, 2.75)	0.1		1 (0.57, 1.74)	>0.9	
	12-51	1.09 (0.59, 2)	0.8		0.98 (0.53, 1.8)	>0.9	
	52-103	Reference			Reference		
	104-364	1.28 (0.65, 2.52)	0.5		1.21 (0.59, 2.45)	0.6	
	≥365	2.13 (0.73, 6.23)	0.2		2.22 (0.8, 6.19)	0.13	
BMI, <25 Kg/m2	0	2.32 (0.86, 6.25)	0.093	0.011*	1.77 (0.77, 4.05)	0.2	0.058
	1	1.04 (0.25, 4.37)	>0.9		3.11 (1.16, 8.37)	0.024**	

Table S1. All subgroup analyses exploring the association between sexual frequency and CVD incidence and all-cause mortality

Subgroup	Risk of cardiovascular disease OR (95% CI)			P for interaction	All-cause mortality HR(%95CI)		
	Sexual frequency, times/year	OR(95% CI)	p-value		HR95%CI	p-value	P for interaction
	2-11	1.38 (0.48, 3.91)	0.5		0.67 (0.32, 1.4)	0.3	
	12-51	1.59 (0.66, 3.81)	0.3		1.19 (0.56, 2.53)	0.7	
	52-103	Reference			Reference		
	104-364	0.68 (0.22, 2.13)	0.5		2.09 (0.93, 4.68)	0.074	
	≥365	1.55 (0.2, 11.9)	0.7		3.6 (0.61, 21)	0.2	
BMI, 20-30 Kg/m2	0	2.13 (1.15, 3.96)	0.017*		2.98 (1.03, 8.59)	0.043*	
	1	2.95 (0.93, 9.34)	0.065		1.5 (0.42, 5.31)	0.5	
	2-11	2.16 (1.09, 4.29)	0.028*		2.19 (0.78, 6.15)	0.14	
	12-51	1.61 (0.77, 3.38)	0.2		1.3 (0.5, 3.41)	0.6	
	52-103	Reference			Reference		
	104-364	1.53 (0.76, 3.07)	0.2		1.51 (0.41, 5.5)	0.5	
	≥365	1.66 (0.36, 7.52)	0.5		5.09 (1.77, 14.6)	0.002**	
BMI, >30 Kg/m2	0	1.87 (0.95, 3.66)	0.069		2.58 (1.49, 4.46)	<0.001***	
	1	2.22 (0.85, 5.8)	0.1		1.68 (0.7, 4)	0.2	
	2-11	2.29 (1.3, 4.04)	0.005**		1.15 (0.54, 2.47)	0.7	
	12-51	1.63 (0.91, 2.92)	0.1		0.97 (0.51, 1.85)	>0.9	
	52-103	Reference			Reference		
	104-364	3.21 (1.52, 6.77)	0.003**		0.95 (0.38, 2.35)	>0.9	
	≥365	4.5 (1.42, 14.3)	0.012*		1.01 (0.22, 4.77)	>0.9	
Hypertension	0	2.18 (1.37, 3.47)	0.001**	0.11	1.78 (0.94, 3.36)	0.075	0.695
	1	1.05 (0.48, 2.33)	0.9		1.57 (0.64, 3.85)	0.3	
	2-11	1.72 (1.01, 2.93)	0.046*		0.83 (0.42, 1.65)	0.6	
	12-51	1.24 (0.7, 2.17)	0.5		0.85 (0.43, 1.69)	0.6	
	52-103	Reference			Reference		

Table S1. All subgroup analyses exploring the association between sexual frequency and CVD incidence and all-cause mortality

Subgroup	Risk of cardiovascular disease OR (95% CI)			P for interaction	All-cause mortality HR(%95CI)		
	Sexual frequency, times/year	OR(95% CI)	p-value		HR95%CI	p-value	P for interaction
Without Hypertension	104-364	1.42 (0.73, 2.75)	0.3	0.007**	1.4 (0.67, 2.94)	0.4	0.17
	≥365	2.58 (0.86, 7.69)	0.088		2.43 (0.57, 10.3)	0.2	
	0	0.86 (0.4, 1.83)	0.7		2.54 (1.37, 4.73)	0.003**	
	1	1.97 (0.78, 4.96)	0.15		1.9 (0.97, 3.71)	0.06*	
	2-11	1.28 (0.72, 2.29)	0.4		1.55 (0.91, 2.66)	0.11	
	12-51	0.85 (0.46, 1.55)	0.6		1.13 (0.67, 1.91)	0.7	
	52-103	Reference			Reference		
	104-364	1.5 (0.68, 3.33)	0.3		1.42 (0.81, 2.49)	0.2	
Diabetes	≥365	1.85 (0.5, 6.79)	0.4	0.007**	2.72 (1.17, 6.35)	0.021*	0.17
	0	3.61 (1.21, 10.7)	0.022*		2.36 (1.15, 4.85)	0.02*	
	1	2.59 (0.74, 9.1)	0.14		0.86 (0.29, 2.51)	0.8	
	2-11	3.33 (1.24, 8.98)	0.018*		1.06 (0.53, 2.13)	0.9	
	12-51	2.42 (0.99, 5.91)	0.053		1.42 (0.67, 3.03)	0.4	
	52-103	Reference			Reference		
	104-364	6.33 (2.08, 19.3)	0.001**		0.4 (0.05, 3.24)	0.4	
	≥365	20.2 (3.41, 120)	0.001**		1.66 (0.21, 13)	0.6	
Without Diabetes	0	1.66 (1.09, 2.52)	0.018*		2.26 (1.25, 4.09)	0.007**	
	1	1.61 (0.78, 3.32)	0.2		2.04 (0.99, 4.2)	0.052	
	2-11	1.49 (0.95, 2.33)	0.079		1.29 (0.74, 2.24)	0.4	
	12-51	0.99 (0.61, 1.61)	>0.9		0.97 (0.53, 1.76)	>0.9	
	52-103	Reference			Reference		
	104-364	1.14 (0.67, 1.93)	0.6		1.51 (0.89, 2.59)	0.13	
	≥365	1.22 (0.46, 3.26)	0.7		2.99 (1.31, 6.82)	0.009**	

Table S1. All subgroup analyses exploring the association between sexual frequency and CVD incidence and all-cause mortality							
Subgroup	Risk of cardiovascular disease OR (95% CI)				All-cause mortality HR(%95CI)		
	Sexual frequency, times/year	OR(95% CI)	p-value	P for interaction	HR95%CI	p-value	P for interaction
Unpartnered	0	1.09 (0.5, 2.36)	0.8	0.8	4.14 (1.88, 9.12)	<0.001***	0.546
	1	1.56 (0.66, 3.68)	0.3		3.1 (1.26, 7.61)	0.014*	
	2-11	1.7 (0.84, 3.46)	0.14		2.85 (1.33, 6.09)	0.007**	
	12-51	1.16 (0.54, 2.51)	0.7		1.89 (0.86, 4.18)	0.11	
	52-103	Reference			Reference		
	104-364	1.61 (0.56, 4.58)	0.4		3.11 (1.25, 7.72)	0.015*	
	≥365	2.59 (0.55, 12.1)	0.2		5.41 (1.38, 21.2)	0.015*	
partnered	0	2.15 (1.32, 3.52)	0.003**		1.74 (1.01, 3.02)	0.048*	
	1	1.66 (0.74, 3.73)	0.2		2.18 (1.02, 4.67)	0.045*	
	2-11	1.7 (1.03, 2.81)	0.037*		0.97 (0.53, 1.76)	>0.9	
	12-51	1.14 (0.68, 1.92)	0.6		1.05 (0.59, 1.86)	0.9	
	52-103	Reference			Reference		
	104-364	1.54 (0.86, 2.77)	0.14		1.17 (0.59, 2.32)	0.6	
	≥365	2.04 (0.76, 5.48)	0.2		1.93 (0.41, 9.1)	0.4	
PHQ-9 <10	0	1.42 (0.93, 2.15)	0.1	<0.001	2.34 (1.41, 3.88)	<0.001***	0.31
	1	1.37 (0.69, 2.7)	0.4		1.69 (0.81, 3.5)	0.2	
	2-11	1.4 (0.92, 2.15)	0.12		1.21 (0.71, 2.09)	0.5	
	12-51	1 (0.61, 1.64)	>0.9		1.04 (0.62, 1.75)	0.9	
	52-103	Reference			Reference		
	104-364	1.13 (0.63, 2.05)	0.7		1.31 (0.75, 2.29)	0.3	
	≥365	1.76 (0.62, 5.02)	0.3		1.71 (0.63, 4.61)	0.3	
PHQ-9 ≥10	0	2.45 (0.91, 6.59)	0.076		3.46 (1.56, 7.66)	0.002**	
	1	3.01 (0.77, 11.7)	0.11		4.1 (1.34, 12.6)	0.013*	
	2-11	3.06 (1.42, 6.6)	0.005**		1.83 (0.71, 4.75)	0.2	

Table S1. All subgroup analyses exploring the association between sexual frequency and CVD incidence and all-cause mortality

Subgroup	Risk of cardiovascular disease OR (95% CI)			P for interaction	All-cause mortality HR(%95CI)		
	Sexual frequency, times/year	OR(95% CI)	p-value		HR95%CI	p-value	P for interaction
	12-51	2.01 (0.76, 5.31)	0.2		1.48 (0.65, 3.34)	0.4	
	52-103	Reference			Reference		
	104-364	5.01 (1.83, 13.7)	0.002**		2.05 (0.66, 6.39)	0.2	
	≥365	9.02 (2.19, 37.1)	0.003**		7.51 (2.49, 22.7)	<0.001***	
Race-white	0	0.92 (0.47, 1.82)	0.8	0.032	3.21 (1.62, 4.97)	<0.001***	<0.001***
	1	1.47 (0.59, 3.62)	0.4		2.81 (1.4, 5.64)	0.004**	
	2-11	1.43 (0.88, 2.32)	0.14		1.53 (0.91, 2.57)	0.11	
	12-51	1.16 (0.66, 2.02)	0.6		0.93 (0.55, 1.58)	0.8	
	52-103	Reference			Reference		
	104-364	1.26 (0.65, 2.43)	0.5		1.69 (1.01, 2.85)	0.048*	
	≥365	1.41 (0.33, 6.08)	0.6		2.76 (0.82, 9.32)	0.1	
Race-black	0	1.85 (1.03, 3.33)	0.039*		1.86 (1.08, 3.2)	0.025*	
	1	0.51 (0.2, 1.31)	0.2		0.96 (0.36, 2.54)	>0.9	
	2-11	1.47 (0.79, 2.73)	0.2		0.82 (0.45, 1.51)	0.5	
	12-51	0.74 (0.38, 1.44)	0.4		1.15 (0.65, 2.05)	0.6	
	52-103	Reference			Reference		
	104-364	0.88 (0.38, 2.08)	0.8		0.96 (0.38, 2.42)	>0.9	
	≥365	2.18 (0.6, 7.95)	0.2		3.74 (1.53, 9.12)	0.004**	
Race-other	0	2.31 (1.14, 4.66)	0.02*		2.15 (0.88, 5.27)	0.093	
	1	2.9 (1.17, 7.19)	0.022*		1.68 (0.43, 6.56)	0.5	
	2-11	1.63 (0.75, 3.55)	0.2		1.33 (0.57, 3.09)	0.5	
	12-51	0.92 (0.47, 1.82)	0.8		1.41 (0.67, 3)	0.4	
	52-103	Reference			Reference		
	104-364	1.82 (0.87, 3.79)	0.11		1.02 (0.4, 2.56)	>0.9	

Table S1. All subgroup analyses exploring the association between sexual frequency and CVD incidence and all-cause mortality

Subgroup	Risk of cardiovascular disease OR (95% CI)			All-cause mortality HR(%95CI)			
	Sexual frequency, times/year	OR(95% CI)	p-value	P for interaction	HR95%CI	p-value	P for interaction
smoking	≥365	1.89 (0.51, 7.02)	0.3	0.069	0.41 (0.05, 3.12)	0.4	0.7
	0	1.42 (0.82 ,2.46)	0.2		2.56 (1.53 ,4.29)	<0.001***	
	1	1.36 (0.6 ,3.07)	0.5		2.26 (1.2 ,4.28)	0.012*	
	2-11	1.79 (1.12 ,2.86)	0.015*		1.3 (0.81 ,2.1)	0.3	
	12-51	1.38 (0.78 ,2.45)	0.3		0.96 (0.62 ,1.5)	0.9	
	52-103	Reference			Reference		
	104-364	2.01 (1.13 ,3.59)	0.019*		1.53 (0.9 ,2.59)	0.12	
Non-smoking	≥365	1.59 (0.56 ,4.56)	0.4	0.027*	2.67 (1.27 ,5.59)	0.009**	0.026*
	0	2.19 (1.03 ,4.64)	0.041*		2.57 (1.28 ,5.15)	0.008**	
	1	2.13 (0.81 ,5.61)	0.12		1.94 (0.82 ,5.22)	0.2	
	2-11	1.69 (0.78 ,3.65)	0.2		1.52 (0.83 ,2.79)	0.2	
	12-51	0.91 (0.41 ,2.02)	0.8		1.2 (0.62 ,2.32)	0.6	
	52-103	Reference			Reference		
	104-364	0.98 (0.48 ,2)	>0.9		1.33 (0.57 ,3.1)	0.5	
Drinking	≥365	4.21 (0.87 ,20.4)	0.073	0.027*	1.46 (0.31 ,6.94)	0.6	0.026*
	0	2.04 (1.08 ,3.86)	0.029*		2.54 (1.46 ,4.43)	<0.001***	
	1	2.98 (1.29 ,6.91)	0.011*		2.34 (1.14 ,4.78)	0.02*	
	2-11	2.32 (1.41 ,3.84)	0.001**		1.44 (0.83 ,2.5)	0.2	
	12-51	1.54 (0.89 ,2.66)	0.12		0.96 (0.57 ,1.61)	0.9	
	52-103	Reference			Reference		
	104-364	1.81 (1.04 ,3.14)	0.036*		1.57 (0.88 ,2.8)	0.13	
Non-drinking	≥365	2.71 (0.94 ,7.85)	0.066	0.027*	1.62 (0.54 ,4.82)	0.4	0.026*
	0	1.31 (0.6 ,2.84)	0.5		1.75 (0.8 ,3.82)	0.2	
Non-drinking	1	0.39 (0.12 ,1.27)	0.12	0.027*	0.4 (0.1 ,1.59)	0.2	0.026*

Table S1. All subgroup analyses exploring the association between sexual frequency and CVD incidence and all-cause mortality

Subgroup	Risk of cardiovascular disease OR (95% CI)			P for interaction	All-cause mortality HR(%95CI)		
	Sexual frequency, times/year	OR(95% CI)	p-value		HR95%CI	p-value	P for interaction
	2-11	1.03 (0.49 ,2.19)	>0.9		0.9 (0.4 ,2.03)	0.8	
	12-51	0.6 (0.26 ,1.39)	0.2		0.86 (0.39 ,1.88)	0.7	
	52-103	Reference			Reference		
	104-364	1.37 (0.36 ,5.23)	0.6		0.32 (0.11 ,0.92)	0.035*	
	≥365	2.55 (0.49 ,13.3)	0.3		1.02 (0.13 ,8.1)	>0.9	
Education- Up to high school	0	1.65(0.96,2.83)	0.071	0.4	2.11(1.12,3.96)	0.020*	0.6
	1	2.71(1.10,4.27)	0.026		1.87(0.88,3.99)	0.1	
	2-11	1.62(1.03,2.55)	0.036*		0.88(0.46,4.69)	0.7	
	12-51	1.06 (0.65,1.72)	0.8		0.95(0.45,1.97)	0.9	
	52-103	Reference			Reference		
Above high school	104-364	1.26(0.59,2.67)	0.5		0.92(0.40,2.10)	0.8	
	≥365	1.03(0.34,3.07)	>0.9		2.47(0.86,7.14)	0.095	
	0	1.53 (0.73 ,3.21)	0.3		2.83(1.43,5.60)	0.003**	
	1	1.19 (0.39 ,3.68)	0.8		2.56(0.95,6.92)	0.064	
	2-11	1.7 (0.88 ,3.29)	0.11		1.86(0.99,3.50)	0.054	
	12-51	1.21 (0.64 ,2.28)	0.6		1.27(0.68,2.35)	0.5	
	52-103	Reference			Reference		
	104-364	1.72 (0.95 ,3.1)	0.071		2.2(1.17,4.16)	0.015*	
	≥365	5.44 (1.54 ,19.3)	0.01*		2.22(0.65,7.53)	0.2	
INR<2.18	0	1 (0.61 ,1.64)	>0.9	0.2	2.61 (1.34 ,5.1)	0.005**	0.025*
	1	1.36 (0.66 ,2.8)	0.4		2.45 (1.15 ,5.2)	0.02*	
	2-11	1.31 (0.8 ,2.13)	0.3		1.4 (0.78 ,2.53)	0.3	
	12-51	0.88 (0.53 ,1.47)	0.6		1.36 (0.76 ,2.43)	0.3	
	52-103	Reference			Reference		

Table S1. All subgroup analyses exploring the association between sexual frequency and CVD incidence and all-cause mortality

Subgroup	Risk of cardiovascular disease OR (95% CI)				All-cause mortality HR(%95CI)		
	Sexual frequency, times/year	OR(95%CI)	p-value	P for interaction	HR95%CI	p-value	P for interaction
INR>=2.18	104-364	1.06 (0.59 ,1.89)	0.8		1.17 (0.71 ,1.91)	0.5	
	≥365	1.81 (0.68 ,4.82)	0.2		4.34 (1.74 ,10.8)	0.002**	
	0	3.54 (1.64 ,7.61)	0.002**		2.96 (1.49 ,5.9)	0.002**	
	1	1.96 (0.6 ,6.37)	0.3		1.81 (0.69 ,4.75)	0.2	
	2-11	2.65 (1.28 ,5.49)	0.01*		1.47 (0.81 ,2.68)	0.2	
	12-51	1.87 (0.9 ,3.87)	0.092		1.05 (0.56, ,1.96)	0.9	
	52-103	Reference			Reference		
	104-364	2.84 (1.27 ,6.36)	0.012*		2.23 (1.17 ,4.28)	0.015*	
	≥365	1.98 (0.34 ,11.6)	0.4		0.49 (0.07 ,3.38)	0.5	