



# Risk factors associated with suicidal thoughts among 50+ years old residents

## Results from the SHARE survey in Luxembourg

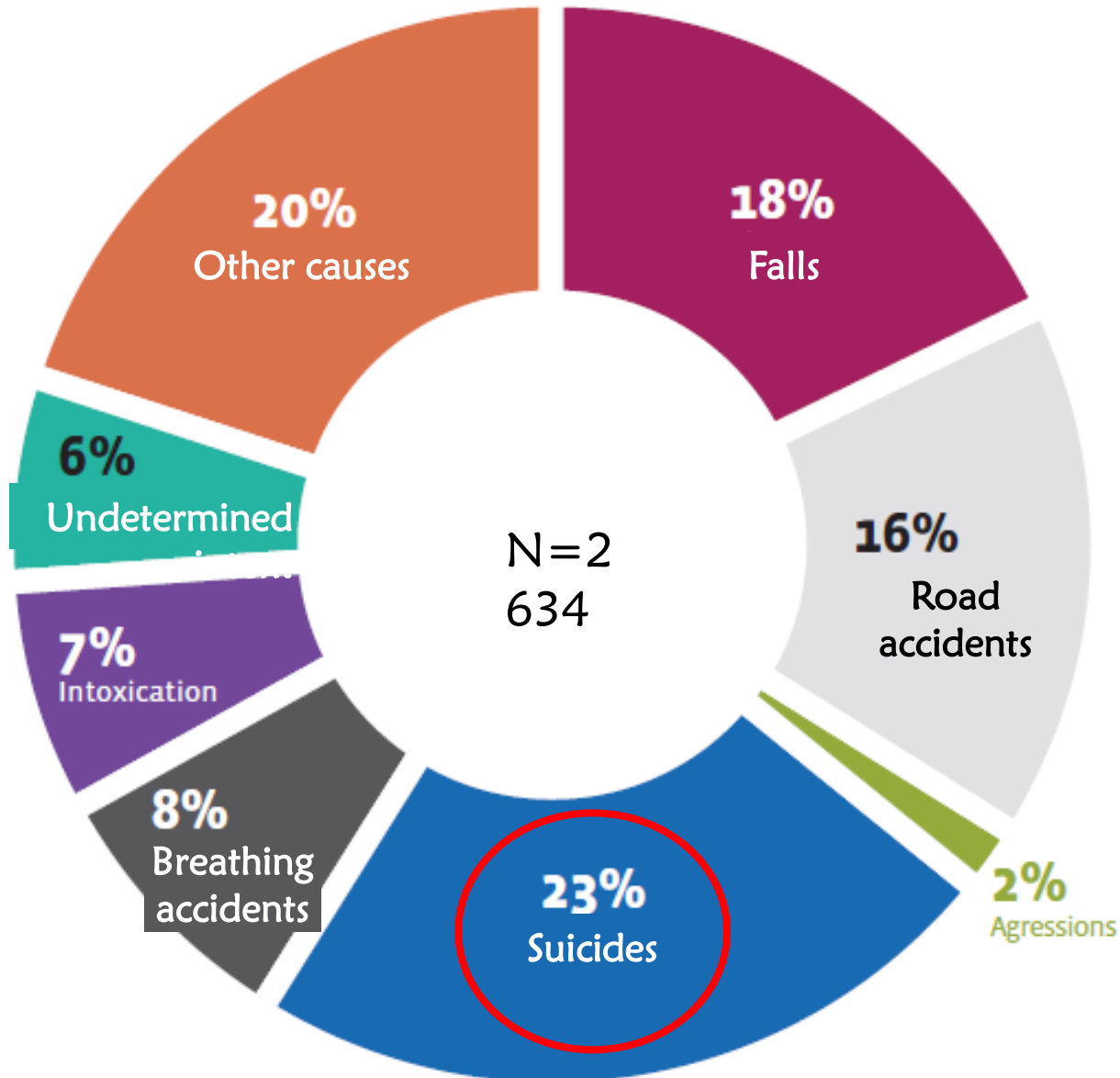
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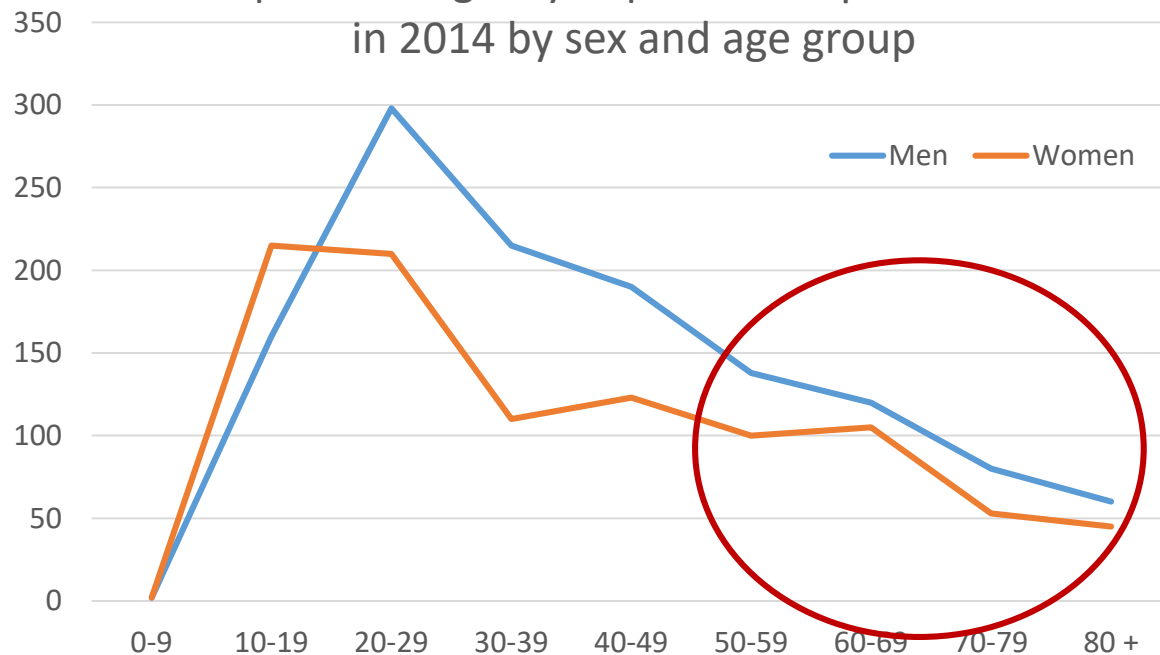
# Causes of fatal injuries in Luxembourg (2005 – 2014)



Suicides are the first cause of traumatic deaths

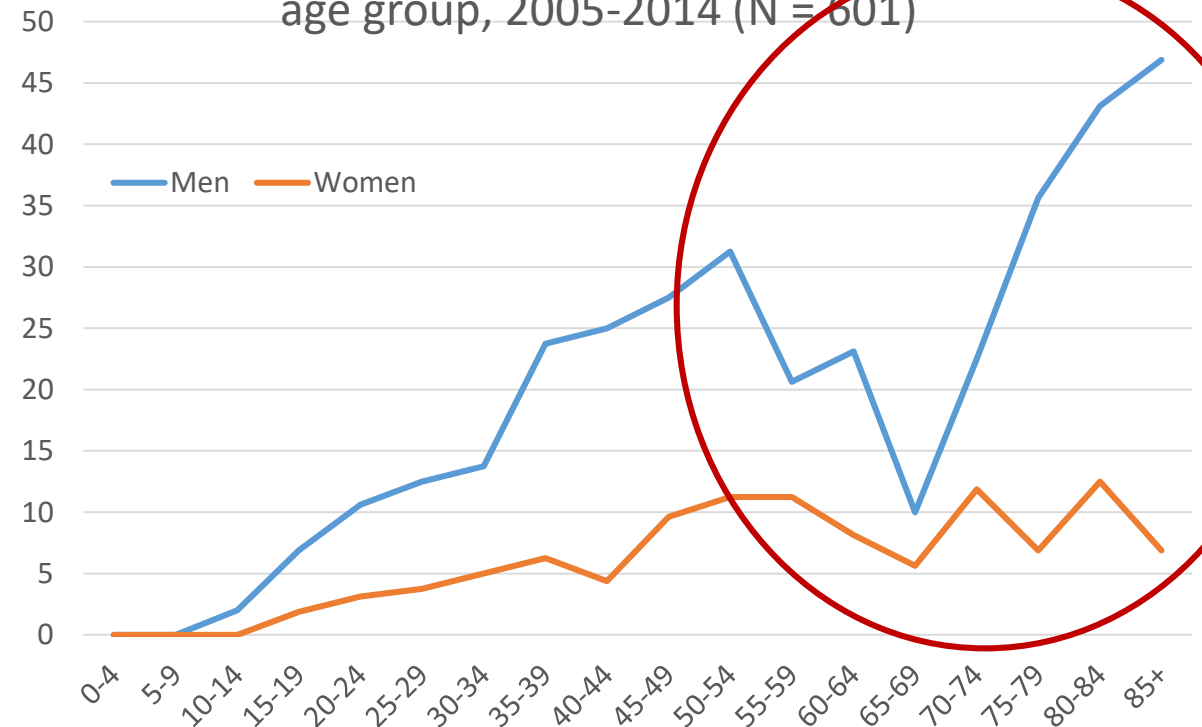
# The risk of dying by suicide increases with age, especially by men

Incidence rate of self-inflicted injuries in hospital emergency departments per 100.000 in 2014 by sex and age group



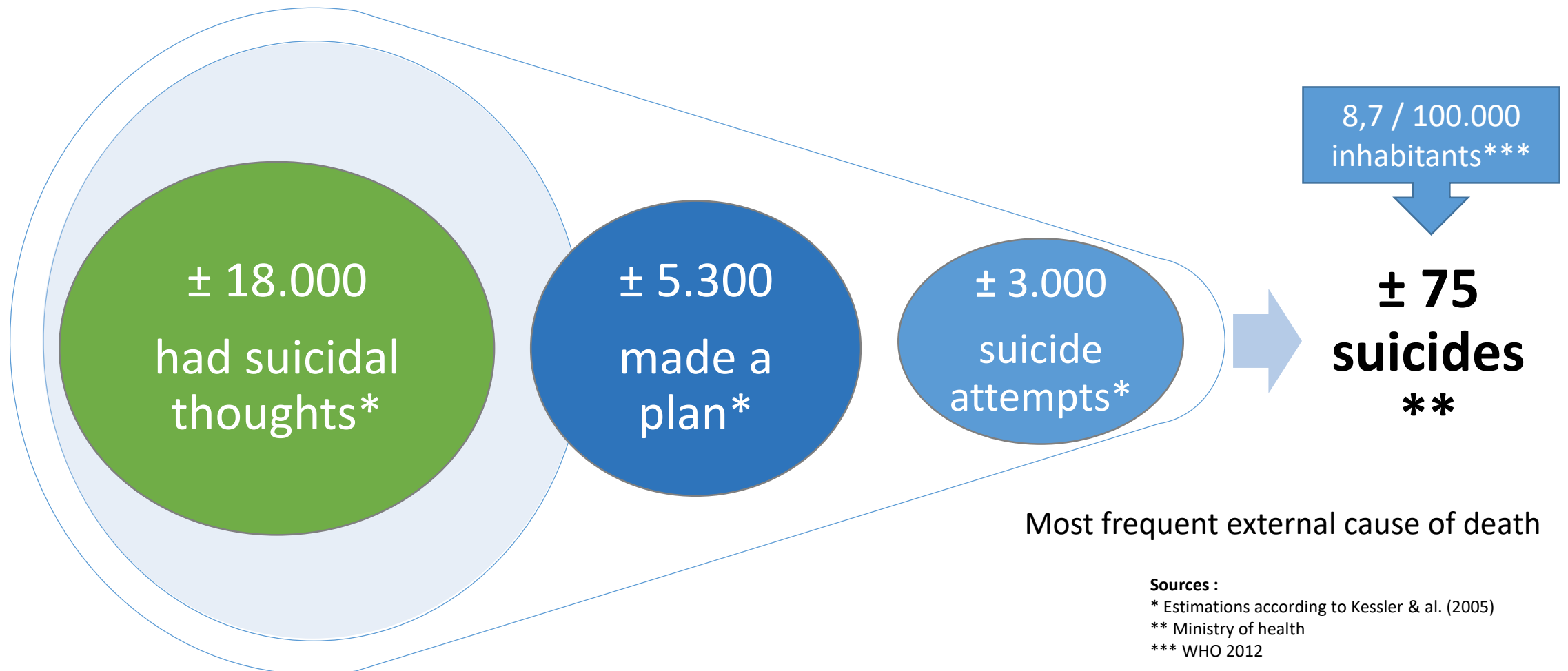
Source: RETRACE 2014

Suicide mortality rate per 100.000 by sex and age group, 2005-2014 (N = 601)



Source: RETRACE 20144

# Suicide in Luxembourg is a major health issue



## ... but still a lack of data in Luxembourg

- What are the risk factors of dying by suicide?
- What factors are associated with suicidal thoughts in older people?
- The only survey that questioned older people about suicidality is the SHARE survey
- Several articles published but none of them includes Luxembourg

### → Our aim

To identify the risk factors associated with suicidal thoughts among 50+ years old residents in Luxembourg

# Survey of Health, Ageing and Retirement in Europe (SHARE) 5<sup>th</sup> wave\*

European cross-national analysis

Collected in 2013 in Luxembourg (1<sup>st</sup> wave for Luxembourg)

Residents aged 50+ years

N= 1,610

- *Computer-assisted personal interviews*
- *Pen-and-paper drop-off questionnaires*

## Suicidal thoughts

Last item from the EURO-D scale \*\* about passive suicidal thoughts

*"In the last month, have you felt that you would rather be dead?"*

Response modalities:

1. Any mention of suicidal feelings or wishing to be dead
2. No such feelings

\* Börsch-Supan, A. (2019). Survey of Health, Ageing and Retirement in Europe (SHARE) Wave 5. Release version: 7.0.0. SHARE-ERIC. Data set. DOI: 10.6103/SHARE.w5.700

\*\* Prince, M. J., Reischies, F., Beekman, A. T., Fuhrer, R., Jonker, C., Kivela, S. L., ... & Van Dyen, H. (1999). Development of the EURO-D scale—a European Union initiative to compare symptoms of depression in 14 European centres. *The British Journal of Psychiatry*, 174(4), 330-338.

## Dependent variables

### Socio-demographic characteristics

- Age
- Sex
- Marital status
- Migration history
- Educational level ISCED-II
- Occupational status

### Health condition

- Chronic diseases <3 vs. 3+ chronic disease
- Sleep problems EURO-D single item
- Depressivity EURO-D single item
- Daily life limitations no vs. 1+

### Quality of life indicators

- CASP-19 index control, autonomy, self-realization, pleasure

## Data analysis

- Bivariate General Estimating Equations to measure the association of each dependent variable with suicidal thoughts
- When  $p < 0.1$ , inclusion in the multivariable analysis

# Results

Associations between each socio-demographic variable and the presence of suicidal thoughts		Presence of suicidal thoughts			General Estimating Equation		
		N	%	Total	Crude OR	CI 95% OR	p
<b>Age</b>	<60 years	42	6.7	627	1		
	60-69	40	7.6	527	1.41	0.86-2.26	0.18
	<b>70-79</b>	34	12.5	271	1.81	1.06-3.08	<b>0.03</b>
	<b>80 +</b>	25	15.4	162	2.95	1.66-5.23	<b>&lt;0.001</b>
<b>Sex</b>	Male	59	7.9	743	1		
	Female	82	9.7	845	1.24	0.89-1.74	0.20
<b>Marital status</b>	Married, cohabitating	93	7.8	1194	1		
	<b>Widowed, divorced, never married</b>	48	12.2	394	1.65	1.11-2.43	<b>0.01</b>
<b>Migration history</b>	Non immigrant	60	7.4	814	1		
	1 <sup>st</sup> generation	54	9.8	551	1.41	0.93-2.13	0.10
	<b>2<sup>nd</sup> generation</b>	27	12.7	213	1.80	1.06-3.04	<b>0.03</b>
<b>Occupational status</b>	Employed	14	3.6	394	1		
	<b>Retired</b>	74	10.0	739	3.40	1.81-6.37	<b>&lt;0.001</b>
	<b>Unemployed, disabled, other</b>	45	10.8	417	2.90	1.58-5.32	<b>&lt;0.001</b>
<b>Educational level</b>	Tertiary	17	5.7	552	1		
	Secondary	45	6.3	599	1.19	0.65-2.16	0.57
	<b>Primary</b>	79	13.6	396	3.02	1.70-5.37	<b>&lt;0.001</b>



# Results

## Associations between each health & quality of life variable and the presence of suicidal thoughts

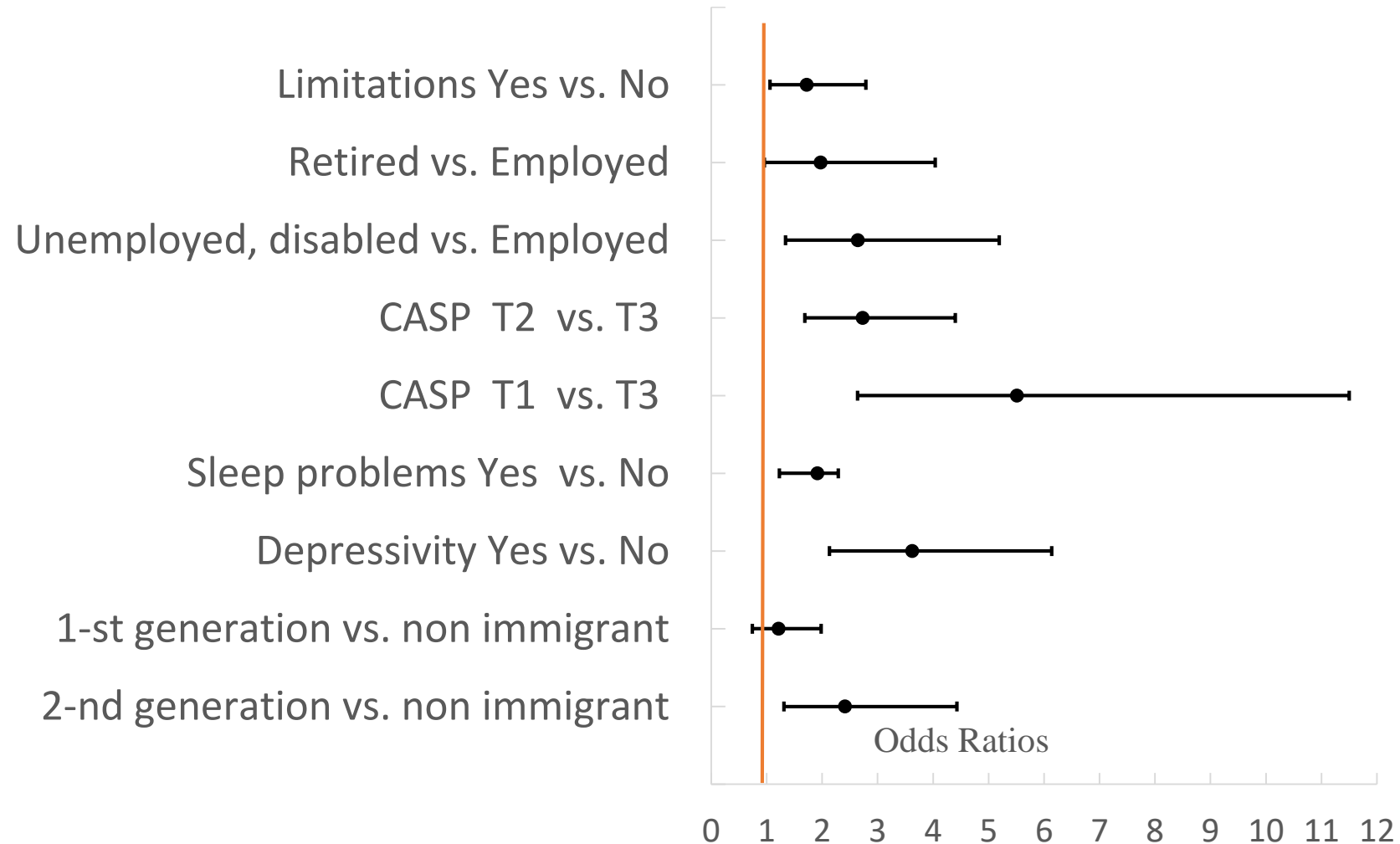
		Presence of suicidal thoughts			General Estimating Equation		
		N	%	Total	Crude OR	IC 95% OR	<i>p</i>
Daily life limitations	No limitations	104	7.4	1409			
	1+ limitations	37	20.7	179	3.39	2.27-5.06	<0.001
Depressivity (EURO-D)	No	25	2.9	865	1		
	Yes	116	16.1	722	5.96	3.73-9.52	<0.001
Sleep problems (EURO-D)	No	51	5.1	1005	1		
	Yes	90	15.4	583	3.35	2.32-4.84	<0.001
Chronic diseases	< 3 diseases	55	5.5	589	1		
	3+ chronic diseases	86	14.6	999	2.33	1.52-3.54	<0.001
Quality of life CASP Index	Tertile 3 (43-48)	9	1.7	531			
	Tertile 2 (38-42)	32	6.0	535	3.92	2.53-6.05	<0.001
	Tertile 1 (17-37)	91	20.8	451	10.82	5.32-21.99	<0.001

# Results

## Multivariable analysis

Total number N= 1476	Crude OR	IC95% OR	<i>p</i>	Adjusted OR	IC95% OR	<i>p</i>
<b>Depressivity (EURO-D)</b>	5.96	3.73-9.52	<0.001	3.62	2.13-6.14	<0.001
<b>Quality of life CASP Index</b>						
Tertile 3 (43-48)	1			1		
Tertile 2 (38-42)	3.92	2.53-6.05	<0.001	2.73	1.69-4.40	<0.001
Tertile 1 (17-37)	10.82	5.32-21.99	<0.001	5.51	2.64-11.50	<0.001
<b>Occupational status</b>						
Employed	1			1		
Retired	3.40	1.81-6.37	<0.001	1.97	0.96-4.04	0.06
Unemployed, disabled, other	2.90	1.58-5.32	<0.001	2.64	1.34-5.19	0.005
<b>Sleep problems (EURO-D)</b>	3.35	2.32-4.84	<0.001	1.91	1.23-2.29	0.001
<b>Daily life limitations</b>	3.39	2.27-5.06	<0.001	1.72	1.06-2.79	0.03
<b>Migration history</b>						
Non-immigrant	1			1		
1 <sup>st</sup> generation	1.41	0.93-2.13	0.10	1.21	0.74-1.98	0.45
2 <sup>nd</sup> generation	1.80	1.06-3.04	0.03	2.41	1.31-4.43	0.005

## Forest plot illustrating the multivariable analysis



# Discussion and perspectives

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- Low quality of life; depressivity; having sleeping problems; being unemployed or disabled; daily life physical limitations, and being a 2-nd generation immigrant were risk factors associated suicidal thoughts
- No association with female gender  
Contrary to Stolz & al. (2015) analysing the SHARE data in 12 countries
- Older age & health conditions found in bivariate analyses, probably compensated by quality of life

## Limitations

- Assessment of death wishes includes passive suicidal thoughts

## Perspectives

- Further analyses would allow to better understand the associations between the different risk factors
- Work in progress to establish a “suicide attempt” component of the IDB-LUX register

## References

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