Obésité, Dysrégulations Métaboliques et Conduites Suicidaires

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Journée de la Société de Psychiatrie de l'Est – 20 mars 2026

Approche intégrative des conduites suicidaires

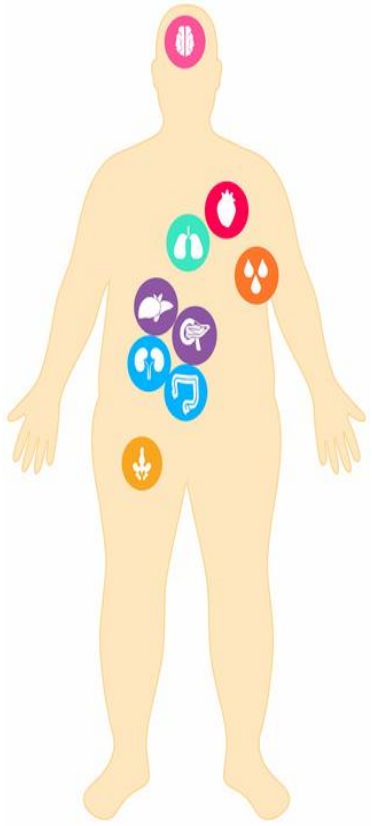
Courtet P et al. World J Biol Psychiatry. 2016 ;17(8):564-586
Maes M et al. J Affect Disord. 2024 ;350:728-740

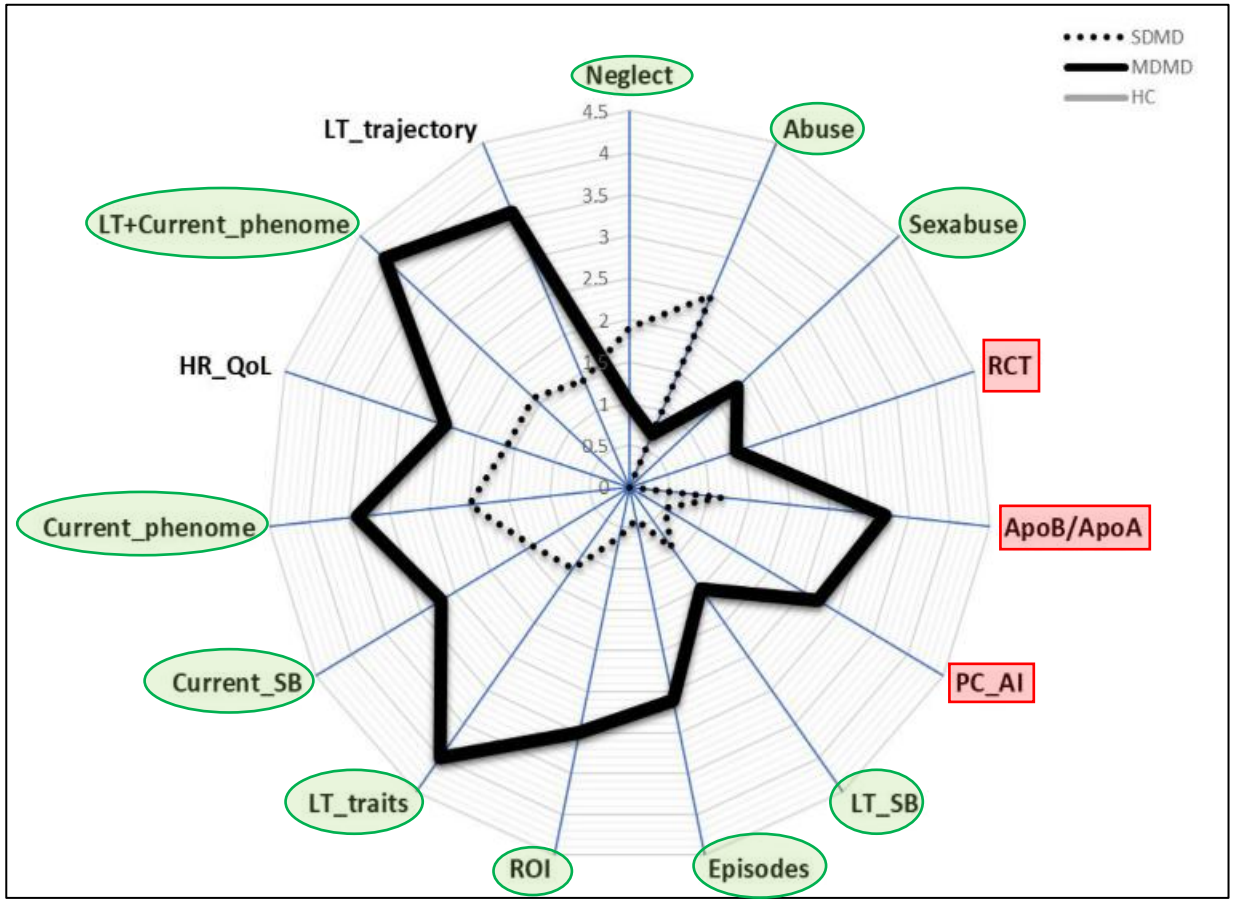
Neuroinflammation in suicide: Toward a comprehensive model

Philippe Courtet, Lucas Giner, Maude Seneque, Sebastien Guillaume, Emilie Olie & Deborah Ducasse

Towards a major methodological shift in depression research by assessing continuous scores of recurrence of illness, lifetime and current suicidal behaviors and phenome features

Michael Maes [a,b,c,d,e,f,g,1], Bo Zhou [a,b,1], Ketsupar Jirakran [c,h,1], Asara Vasupanrajit [c], Patchaya Boonchaya-Anant [i], Chavit Tunvirachaisakul [c,d], Xiaoou Tang [a,b], Jing Li [a,b,*], Abbas F. Almulla [a,b,c,j,**]





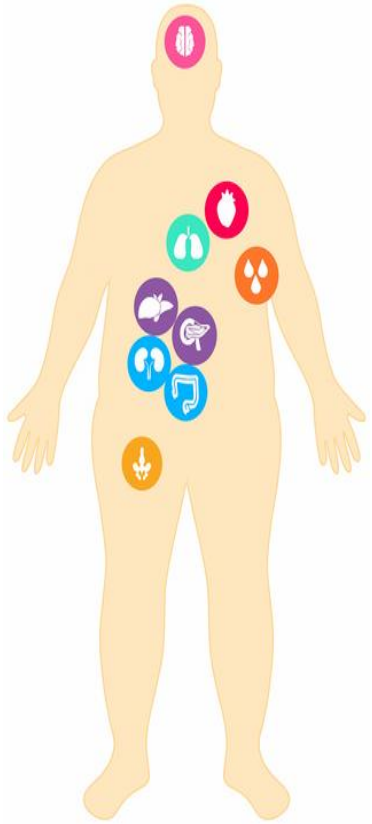
Phénotype somato-psychique

Approche intégrative des comportements alimentaires

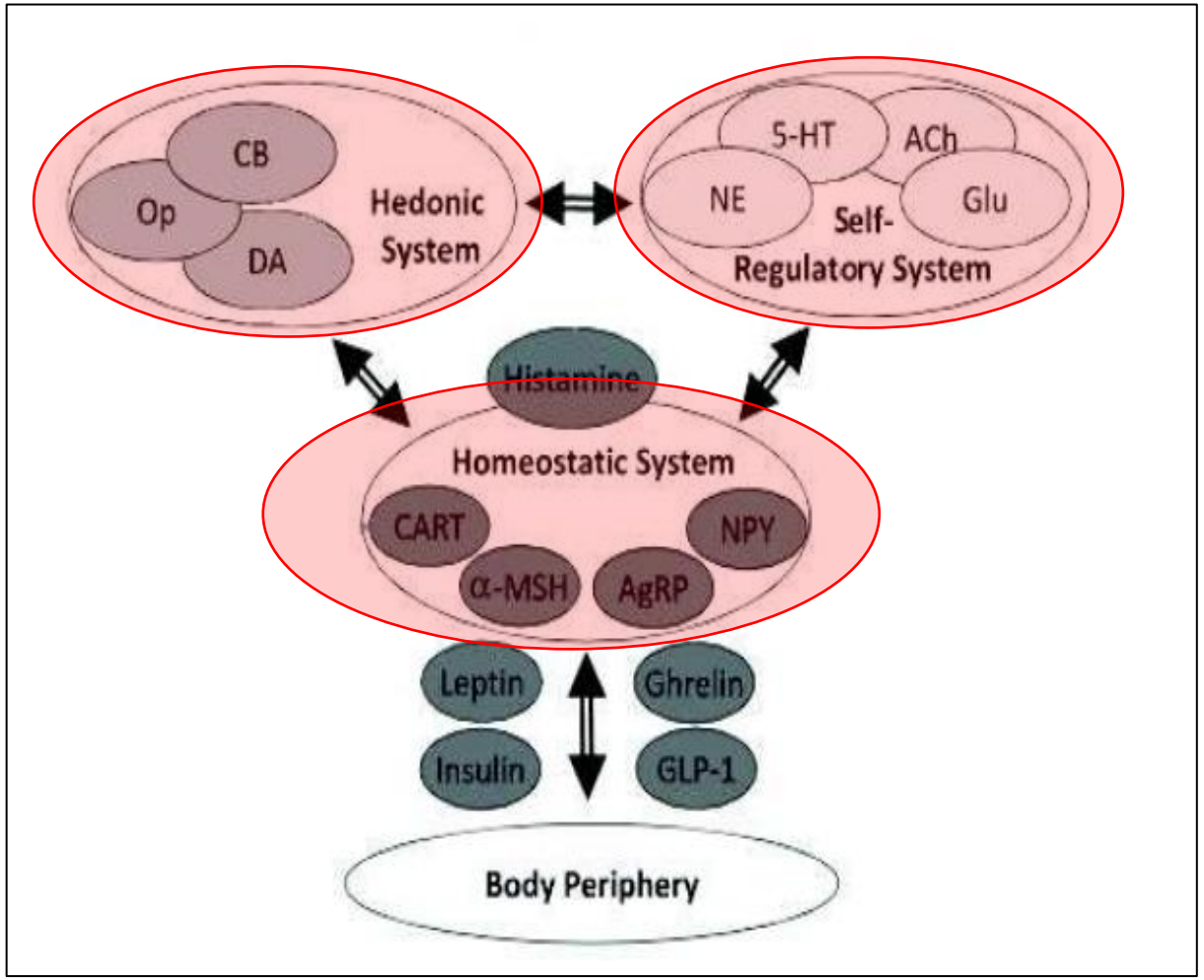
Levasseur P. Thèse Pharmacie, 2019, Université de Rouen, adapté de Himmerich H, Treasure J.
Expert Rev Clin Pharmacol. 2018 ;11(1):95-108

Psychopharmacological advances in eating disorders

Hubertus Himmerich & Janet Treasure



Interactions somato-psychiques complexes « émotions-alimentation-poids »



Obésité, Dysrégulations Métaboliques et Conduites Suicidaires

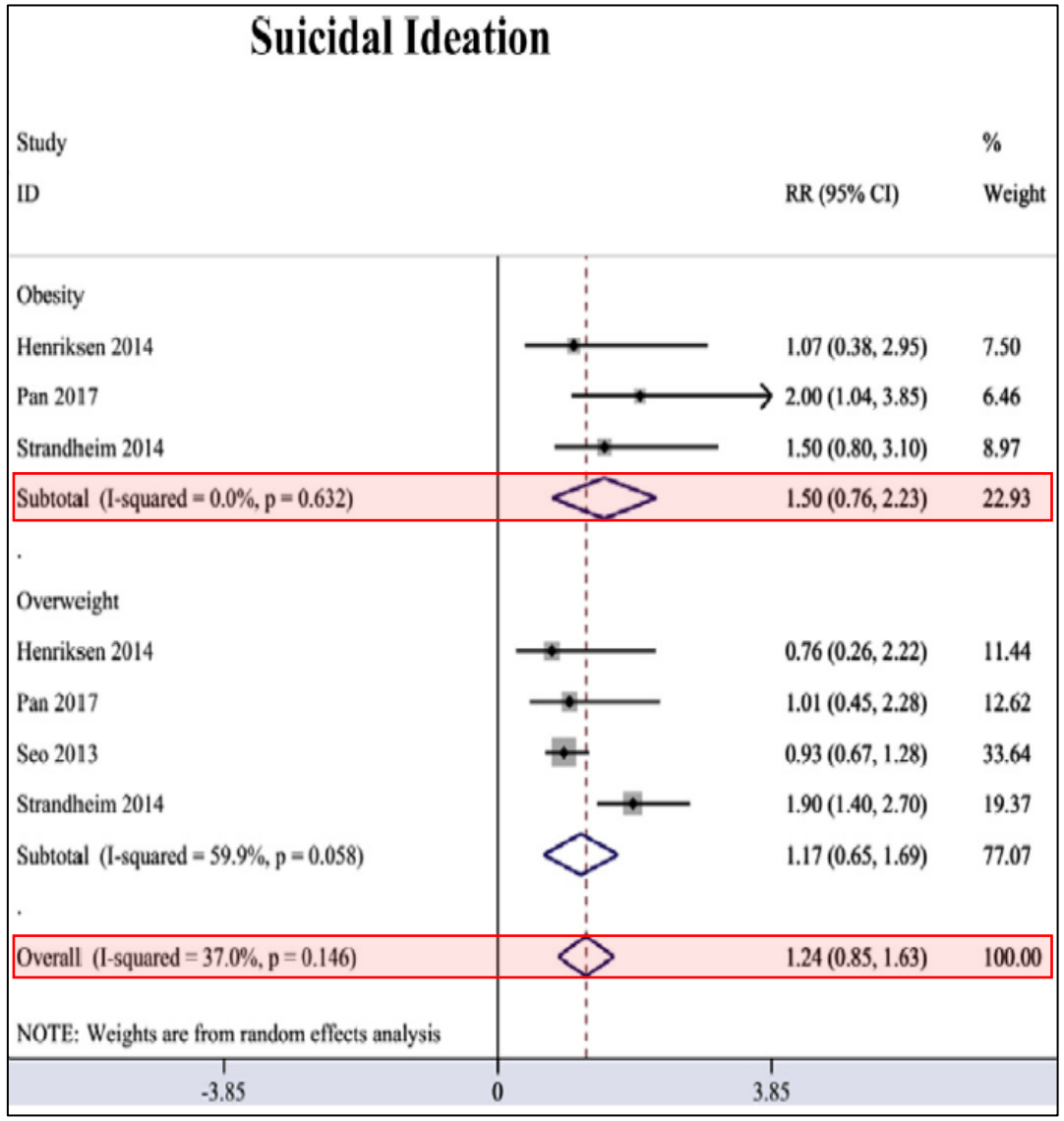
- ***Comment obésité et troubles métaboliques sont-ils associés aux conduites suicidaires ?***
- ***Quels mécanismes biologiques et émotionnels relient métabolisme et suicidalité ?***
- ***Comment intégrer ces éléments scientifiques dans la clinique quotidienne ?***

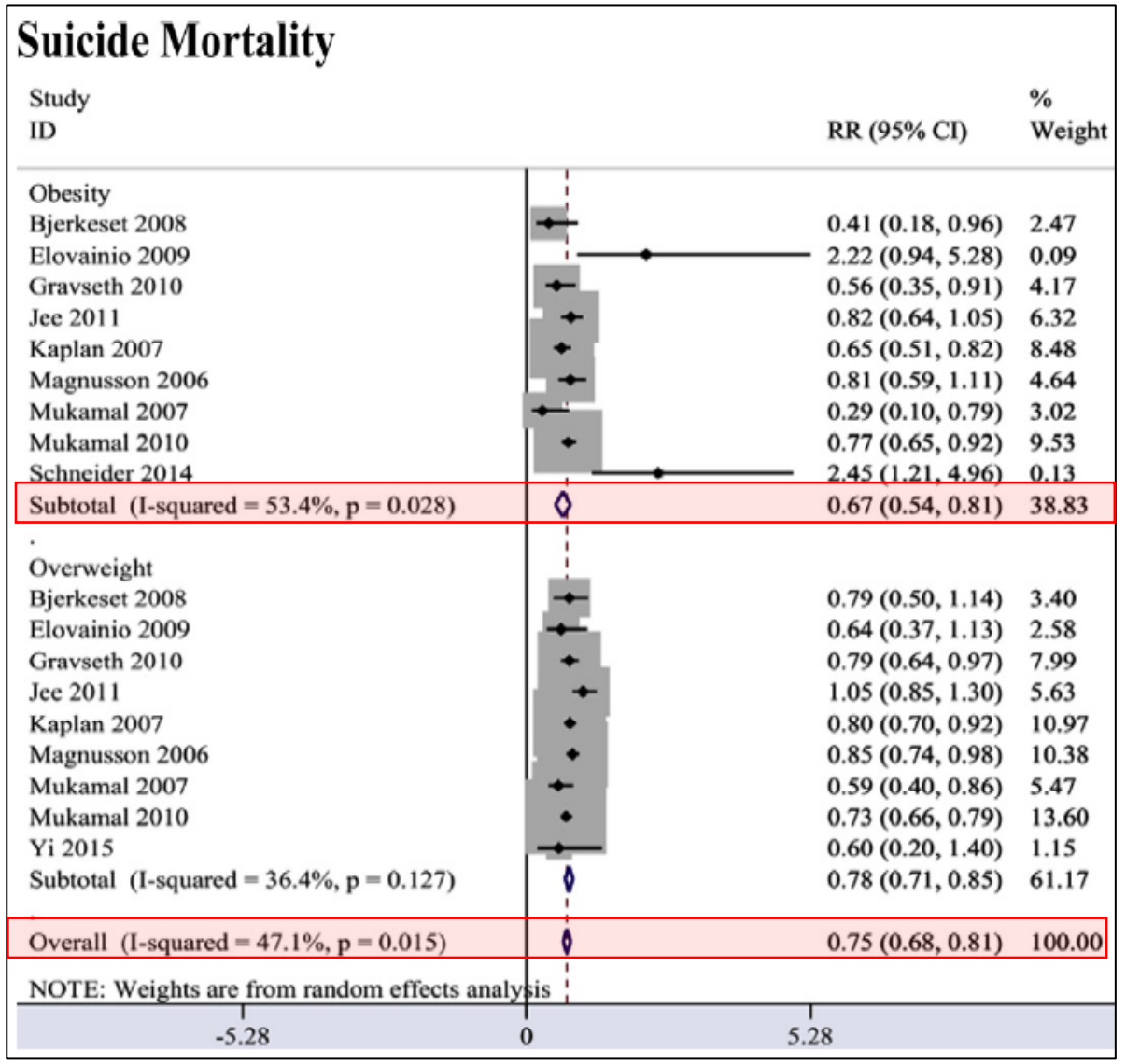
BMI et conduites suicidaires

Amiri S and Behnezhad S. J Affect Disord. 2018;238:615-625

Body mass index and risk of suicide: A systematic review and meta-analysis

Sohrab Amiri[*,a], Sepideh Behnezhad[b]



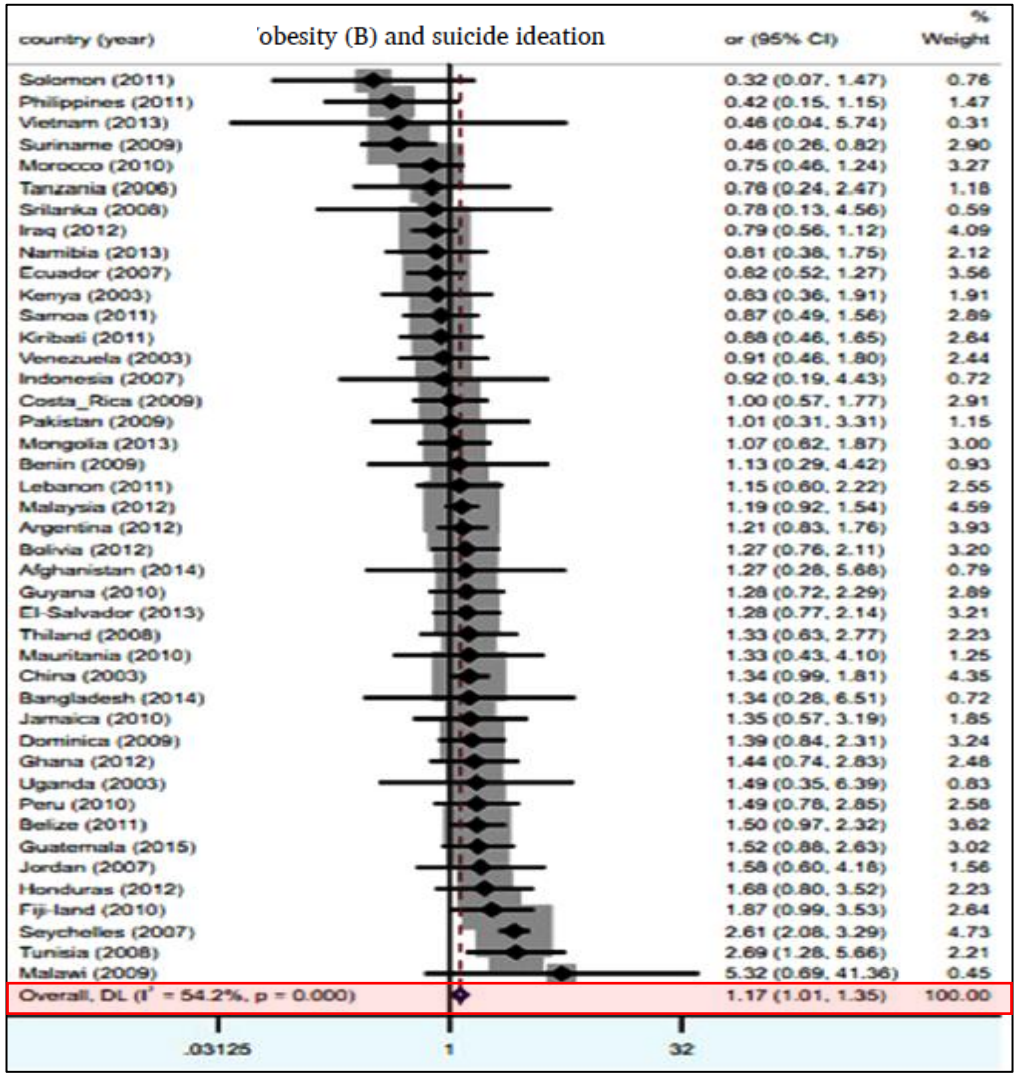


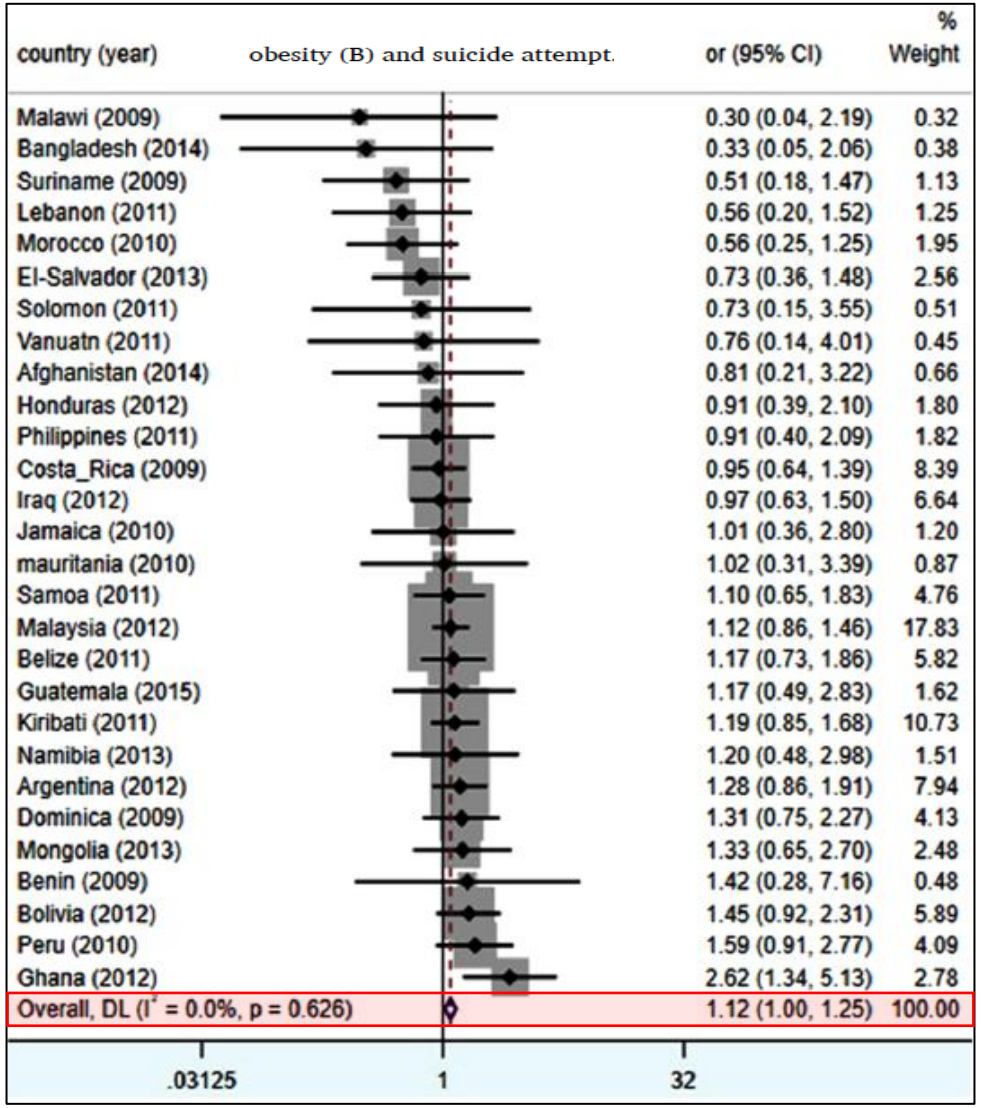
BMI et conduites suicidaires

Zhang MZ. J Affect Disord. 2022 ;298(Pt A):357-363

Body mass index and the risk of suicidal ideation and suicide attempt among youth in 45 low-and middle-income countries

Min-zhe Zhang [a,1], Rui Tang [a,1], Wei-ming Rao [a], Ming-hui Wang [a], Ming-Wei Liu [a], Hong-jie Yu [a], Qi-qiang He [a,b,*]



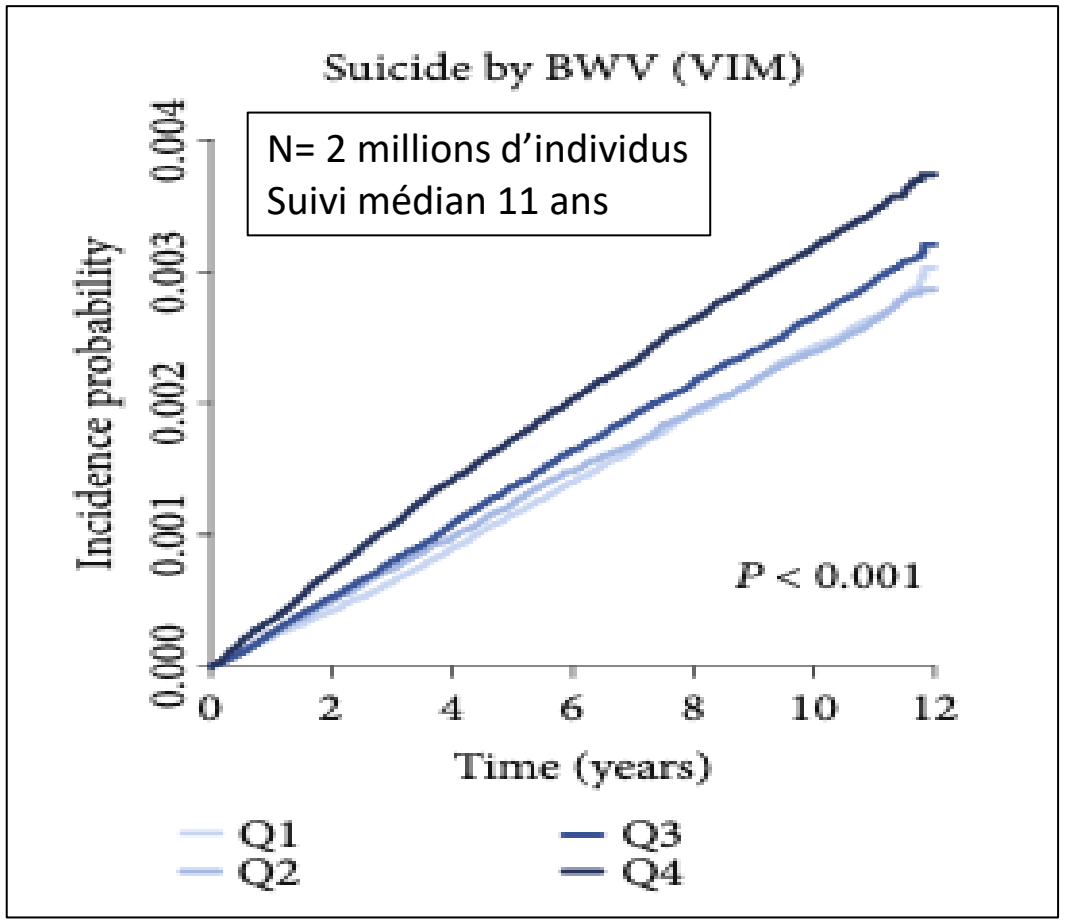


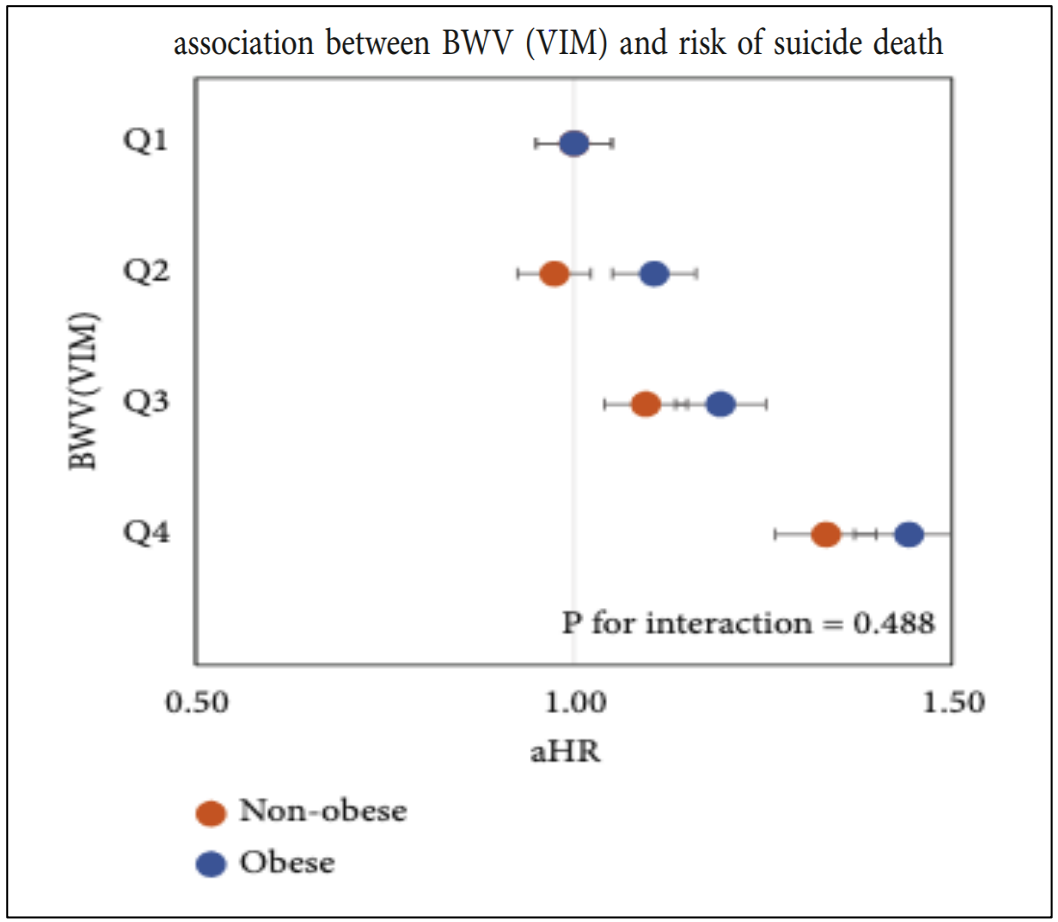
Variation pondérale et conduites suicidaires

Body Weight Variability and Risk of Suicide Mortality: A Nationwide Population-Based Study

Jeongmin Lee,[1] Jin-Hyung Jung,[2] Dong Woo Kang,[3] Min-Hee Kim,[1] Dong-Jun Lim,[4] Hyuk-Sang Kwon,[5] Jung Min Lee,[1] Sang-Ah Chang,[1] Kyungdo Han,[6] and Seung-Hwan Lee[4,7]

Lee J et al. Depress Anxiety. 2024 ;2024:7670729





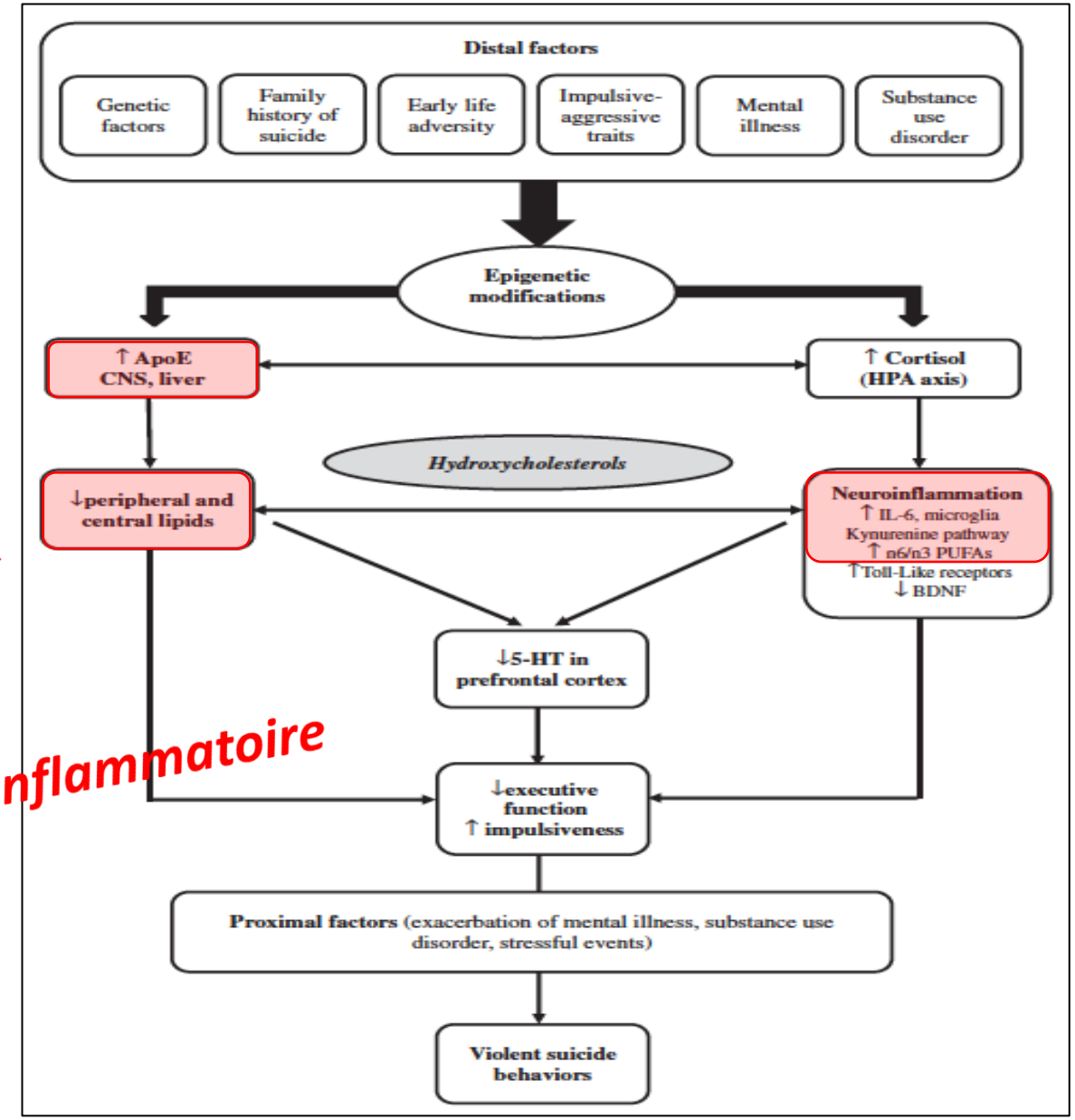
Métabolisme et conduites suicidaires

Biomarkers of suicidal behaviors: A comprehensive critical review

Enrico Capuzzi[a,*], Alice Caldiroli[a], Martina Capellazzi[b], Ilaria Tagliabue[b], Massimiliano Buoli[c,d], Massimo Clerici[a,b]

Capuzzi E et al. Adv Clin Chem. 2020;96:179-216

Surpoids/Obésité
Troubles cardio-métaboliques



Désorganisation métabolo-inflammatoire

Fulton S et a. 2023;45:92-9

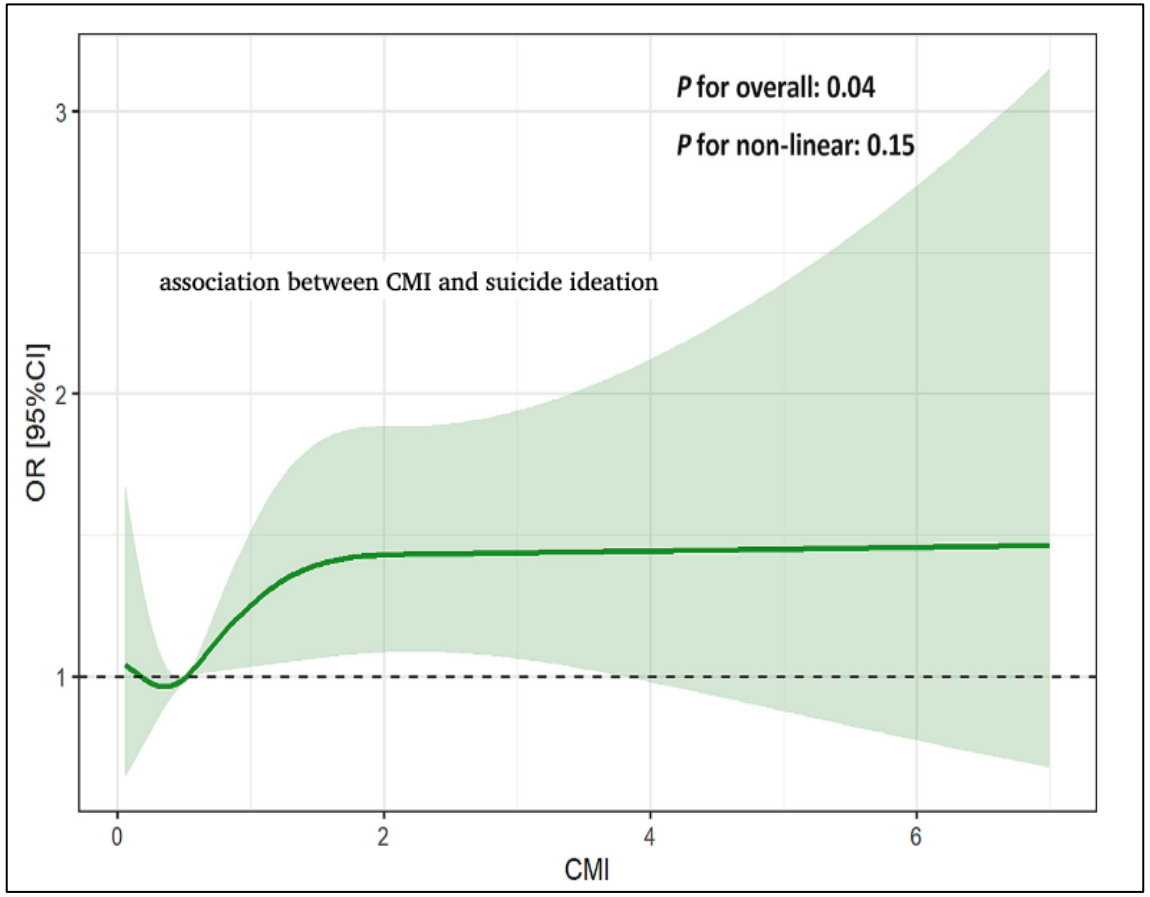
Perturbations cardio-métaboliques et conduites suicidaires

Association between cardiometabolic index (CMI) and suicidal ideation: The mediating role of depression and cardiovascular disease

Chunchun Yu [a,1], Wanting Hu [a,1], Xiong Lei [a,b,*]

N= 13500 sujets,
enquête NHANES, National Health and Nutrition Examination Survey

CMI = (triglycérides / HDL-C) × (waist-to-height ratio).



Associations between CMI and suicidal ideation.

CMI	OR (95 % CI)		
	Model 1	Model 2	Model 3
Continuous	1.25 (1.13, 1.40)	1.23 (1.09, 1.38)	1.17 (1.01, 1.37)
Tertile			
Low	Reference	Reference	Reference
Middle	1.20 (0.90, 1.62)	1.14 (0.84, 1.54)	1.11 (0.81, 1.52)
High	1.74 (1.31, 2.31)	1.61 (1.19, 2.18)	1.41 (1.05, 1.91)
P for trend	<0.001	<0.001	0.028

Yu C et al. J Affect Disord. 2025 ;380:487-495

Syndrome métabolique et conduites suicidaires

ARTICLE OPEN

Check for updates

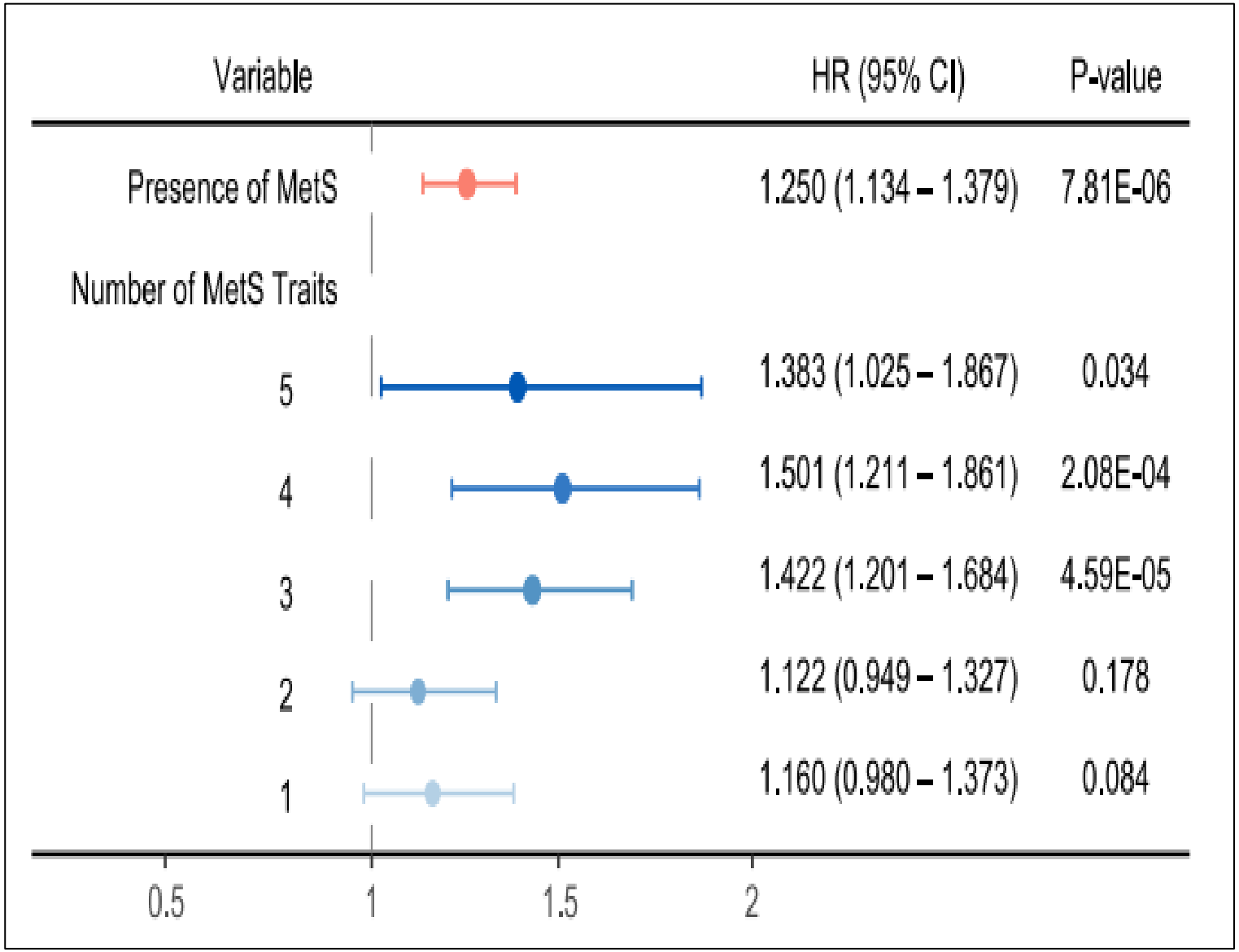
Metabolic syndrome increases the risk of suicide attempt: evidence from a population-based cohort and genomic analysis

Zhengyang Zhao[1], Min Xie[1], Shiwan Tao[1], Qiuyue Lv[1], Jiashuo Zhang[1], Jia Cai[1], Yunjia Liu[1], Yunqi Huang[1], Siyi Liu[1], Yulu Wu[1] and Qiang Wang[1]✉

Zhao Z et al. Transl Psychiatry. 2025 ;15(1):365

N= 380000 sujets (UK Biobank)
Suivi médian 13 ans
Près de 2000 TS durant le suivi
MetS (NCE-ATPIII) = 3 critères sur 5
(Périmètre abdo↑, TA↑, Gly↑, Trigly↑, HDL-C↓)

Effet marqué du Syndr. Metab sur TS:
- ✓ Femmes
- ✓ Age < 55 ans
- ✓ Haut niveau académique
- ✓ Sans antécédents psychiatriques



Diabète et conduites suicidaires

Suicide risk in patients with diabetes: a systematic review and meta-analysis

Bin Wang, Xiaofei An, Xiaohong Shi and Jin-an Zhang

Department of Endocrinology, Jinshan Hospital of Fudan University, Shanghai, China

Correspondence should be addressed to J Zhang
Email zhangjinan@hotmail.com

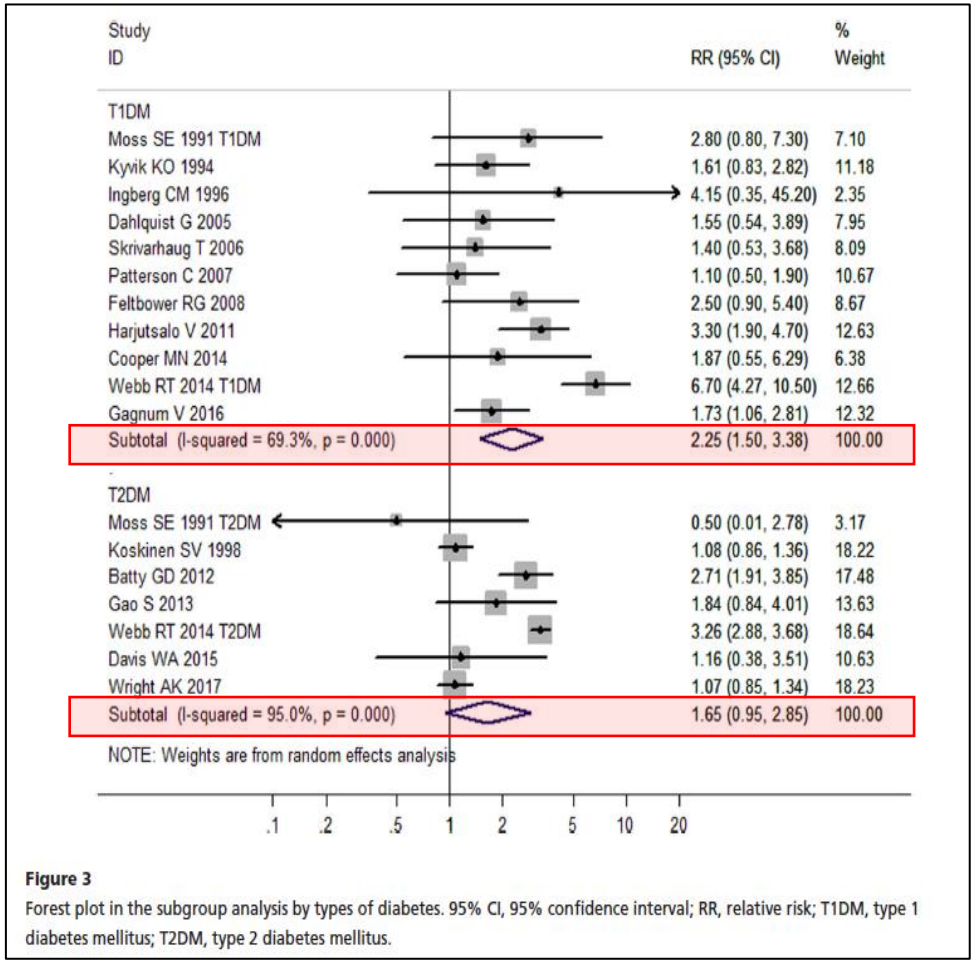


Figure 3
Forest plot in the subgroup analysis by types of diabetes. 95% CI, 95% confidence interval; RR, relative risk; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

Wang B et al. Eur J Endocrinol. 2017 ;177(4):R169-R181

Suicidal Ideation, Suicide Attempts, and Suicide Deaths in Adolescents and Young Adults With Type 1 Diabetes: A Systematic Review and Meta-analysis

Olivier Renaud-Charest, Alexander Stoljar Gold, Elise Mok, Jessica Kichler, Meranda Nakhla, and Patricia Li

Findings

Type 1 diabetes	No type 1 diabetes
Suicidal ideation 15.4% (10.0-21.7)	Suicidal ideation 11.5% (0.4-33.3)
Suicide attempt 3.5% (1.3-6.7)	Suicide attempt 2.0% (0.0-6.4)
Suicide death 0.04% - 4.4%	

Jusqu'à 30% des décès ♂

Associated factors

Suicide-related behaviors ⇄ Difficulties with self-management

? Glycemia

Insulin overdose

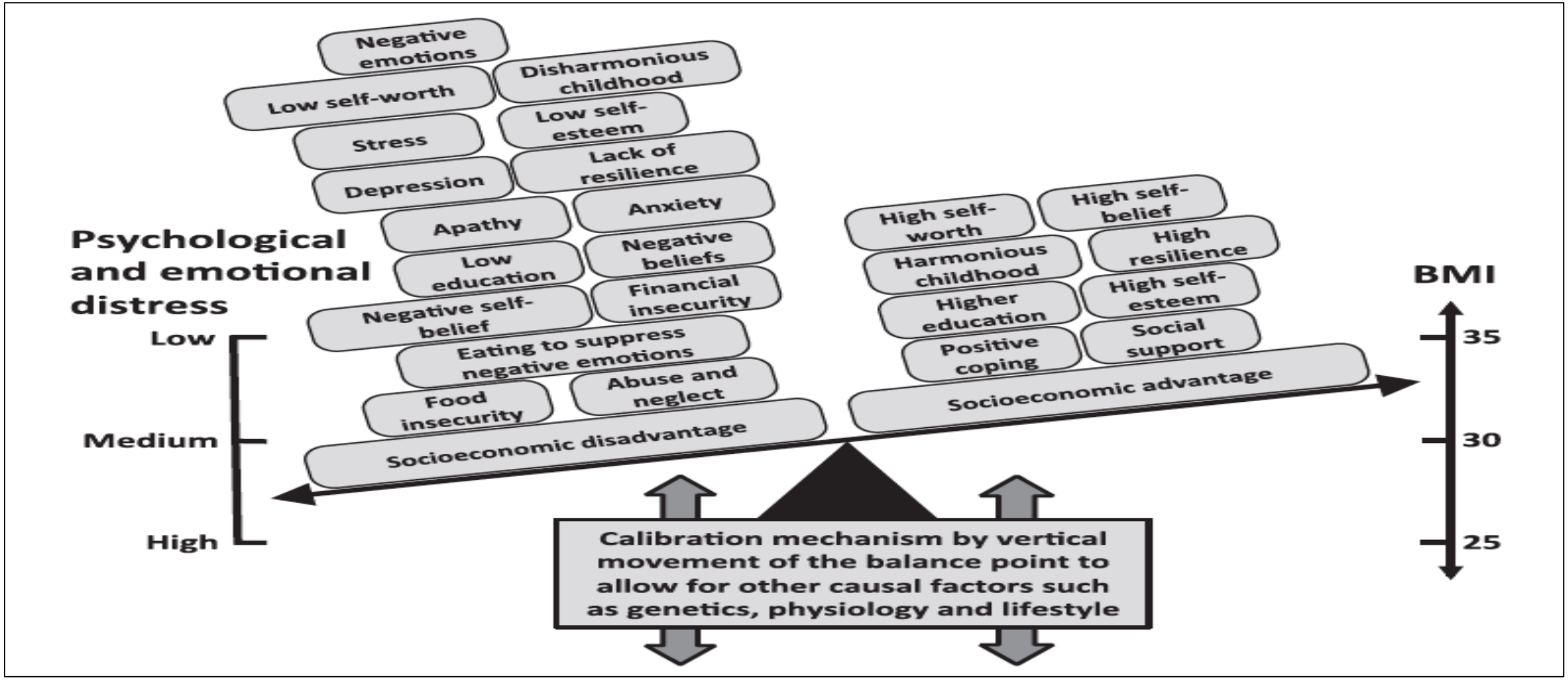
Renaud-Charest O et al. Diabetes Care. 2024 ;47(7):1227-1237
Petit JM et al. Diabetologia. 2020;63(9):1745-1752
Petit JM et al. Med Mal Metab. 2024 ; 18(3): 214-221
Endomba FT et al. Med Mal Metab. 2024 ; 18(3): 204-213

Psychisme, métabolisme et conduites suicidaires

Hemmingsson. Obes Rev. 2014 ;15(9):769-79
Brown et al. EClinicalMedicine. 2022 ;47:101408

A new model of the role of psychological and emotional distress in promoting obesity: conceptual review with implications for treatment and prevention

E. Hemmingsson

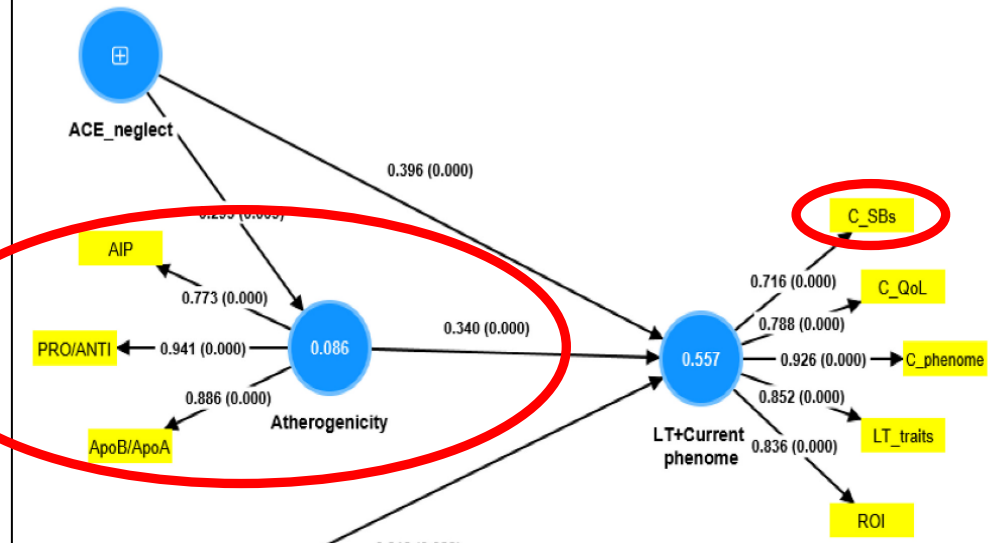


Trouble de l'humeur, métabolisme et conduites suicidaires

Lengvenyte A et al. ; FondaMental Advanced Centers of Expertise in Bipolar Disorders (FACE-BD) Collaborators; J Affect Disord. 2022 ;296:265-276
Maes M et al. J Affect Disord. 2024 ;350:728-740

Towards a major methodological shift in depression research by assessing continuous scores of recurrence of illness, lifetime and current suicidal behaviors and phenome features

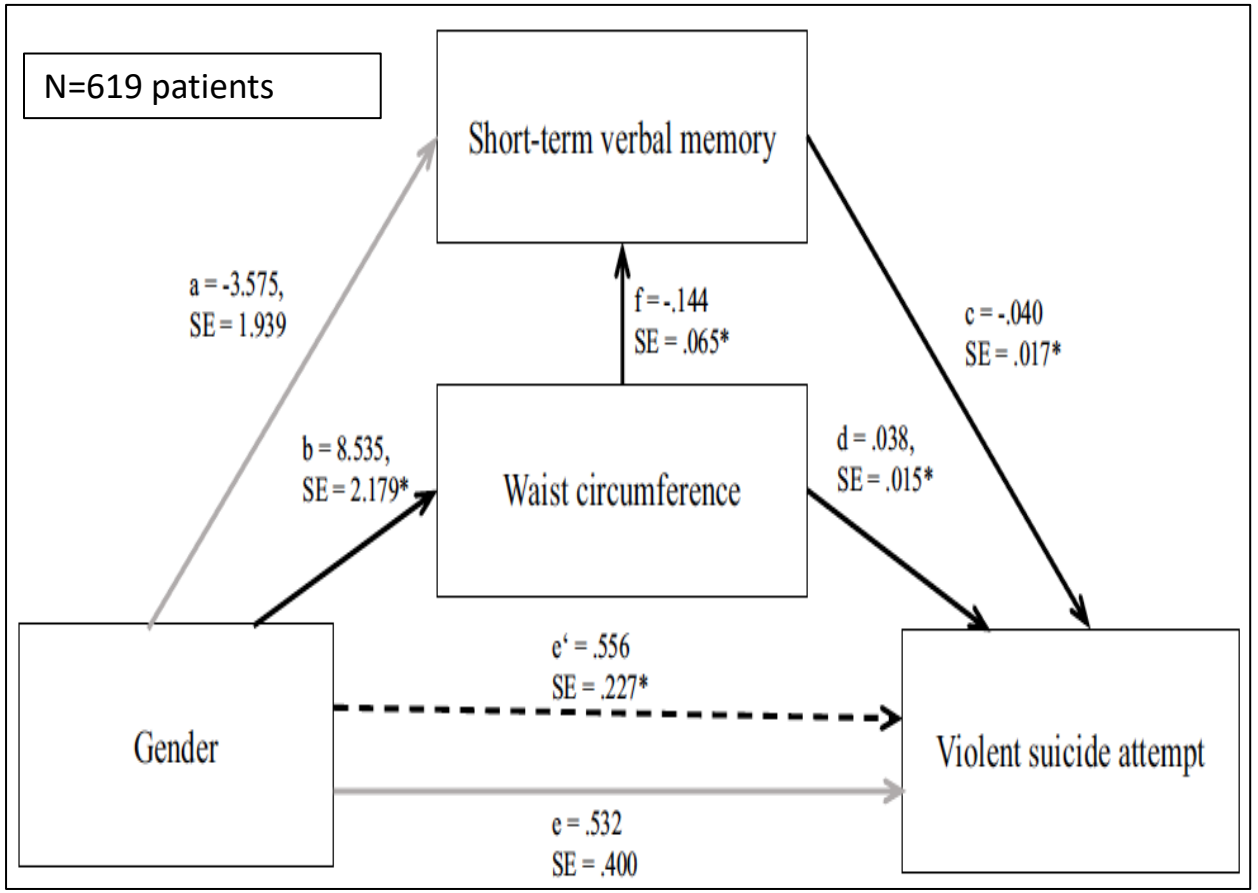
Michael Maes [a,b,c,d,e,f,g,1], Bo Zhou [a,b,1], Ketsupar Jirakran [c,h,1], Asara Vasupanrajit [c], Patchaya Boonchaya-Anant [i], Chavit Tunvirachaisakul [c,d], Xiaoou Tang [a,b], Jing Li [a,b,*], Abbas F. Almulla [a,b,c,j,**]



The final Partial Least Squares (PLS) model after feature reduction.

Violent suicide attempt history in elderly patients with bipolar disorder: The role of sex, abdominal obesity, and verbal memory: Results from the FACE-BD cohort (FondaMental Advanced center of Expertise for Bipolar Disorders)

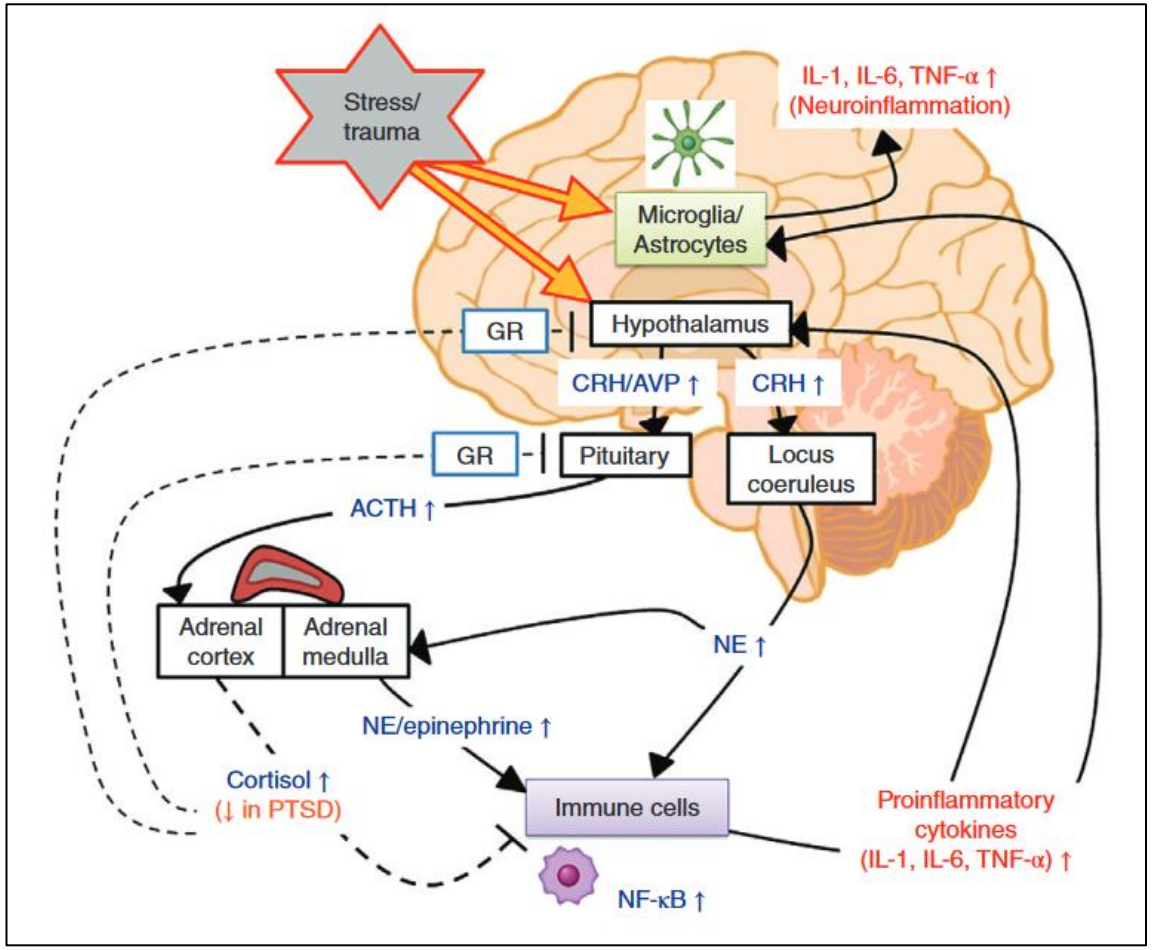
Aiste Lengvenyte [a,b,c,*], Bruno Aouizerate [b,d,e], Valerie Aubin [f], Joséphine Loftus [b,f], Emeline Marlinge [b,g], Raoul Belzeaux [b,h,i], Caroline Dubertret [b,j], Sebastien Gard [b,d], Emmanuel Haffen [b,k], Raymund Schwan [b,l], Pierre-Michel Llorca [b,m], Christine Passerieux [b,n], Paul Roux [b,o], Mircea Polosan [b,n], Bruno Etain [b,g], Marion Leboyer [b,o], FondaMental Advanced Centers of Expertise in Bipolar Disorders (FACE-BD) Collaborators[1], Philippe Courtet [a,b], Emilie Olié [a,b]



Trauma, métabolisme et risque suicidaire

Inflammation and post-traumatic stress disorder

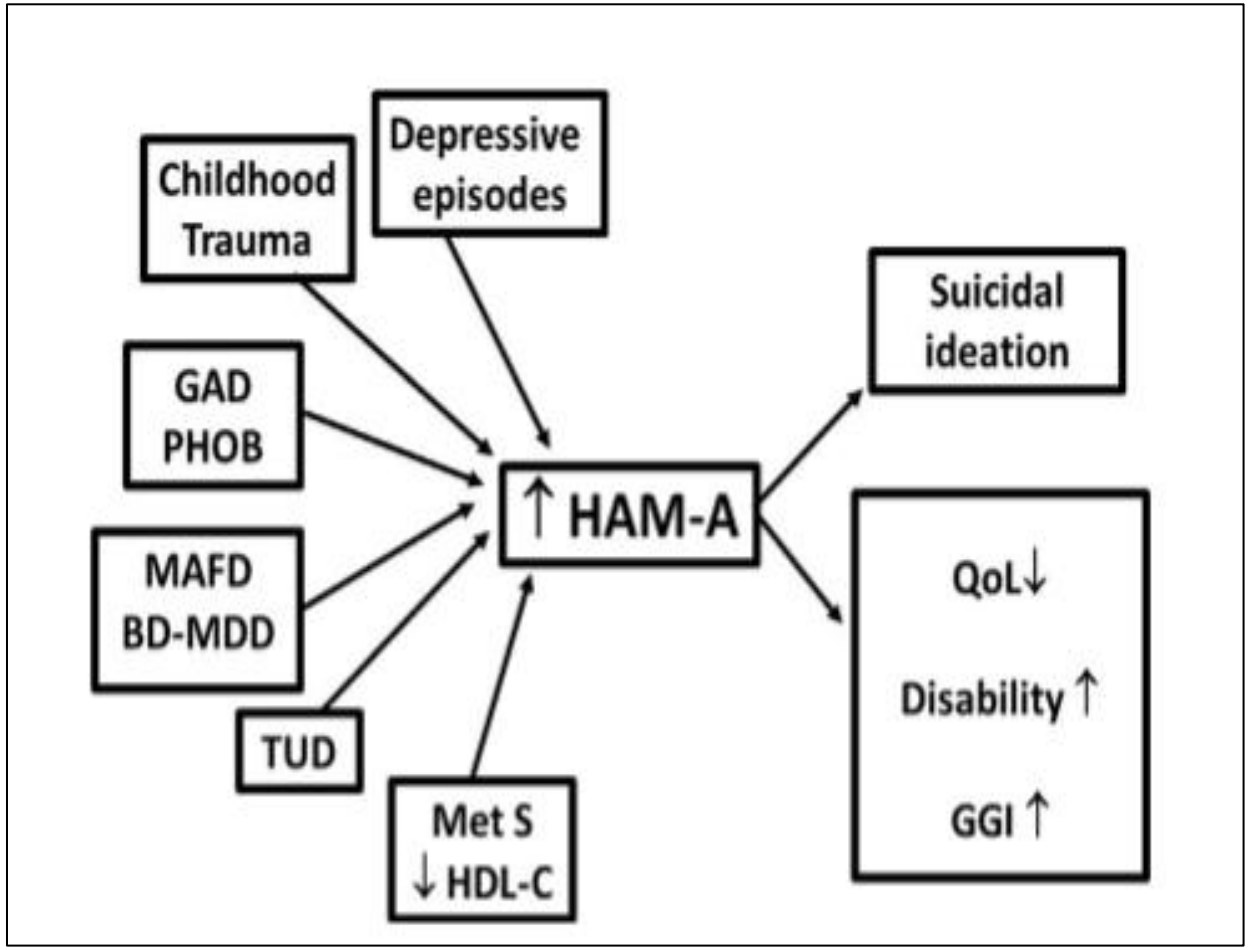
Hiroaki Hori, MD, PhD [1]* and Yoshiharu Kim, MD, PhD[1]



Hori H and Kim Y. Psychiatry Clin Neurosci. 2019 ;73(4):143-153

Associations between severity of anxiety and clinical and biological features of major affective disorders

Fernanda Liboni Cavicchioli[a], Michael Maes[a,b,c,d,*], Chutima Roomruangwong[b], Kamila Landucci Bonifacio[a], Decio Sabbatini Barbosa[a], George Anderson[e], Heber Odebrecht Vargas[a], Sandra Odebrecht Vargas Nunes[a]



Cavicchioli FL et al. Psychiatry Res. 2018 ;260:17-23

Stigmatisation corporelle et risque suicidaire

Perceived Body Discrimination and Intentional Self-Harm and Suicidal Behavior in Adolescence

Angelina R. Sutin, PhD[1], Eric Robinson, PhD[2], Michael Daly, PhD[3–5] and Antonio Terracciano, PhD[1]

Sutin AR et al. Child Obes. 2018 ;14(8):528-536

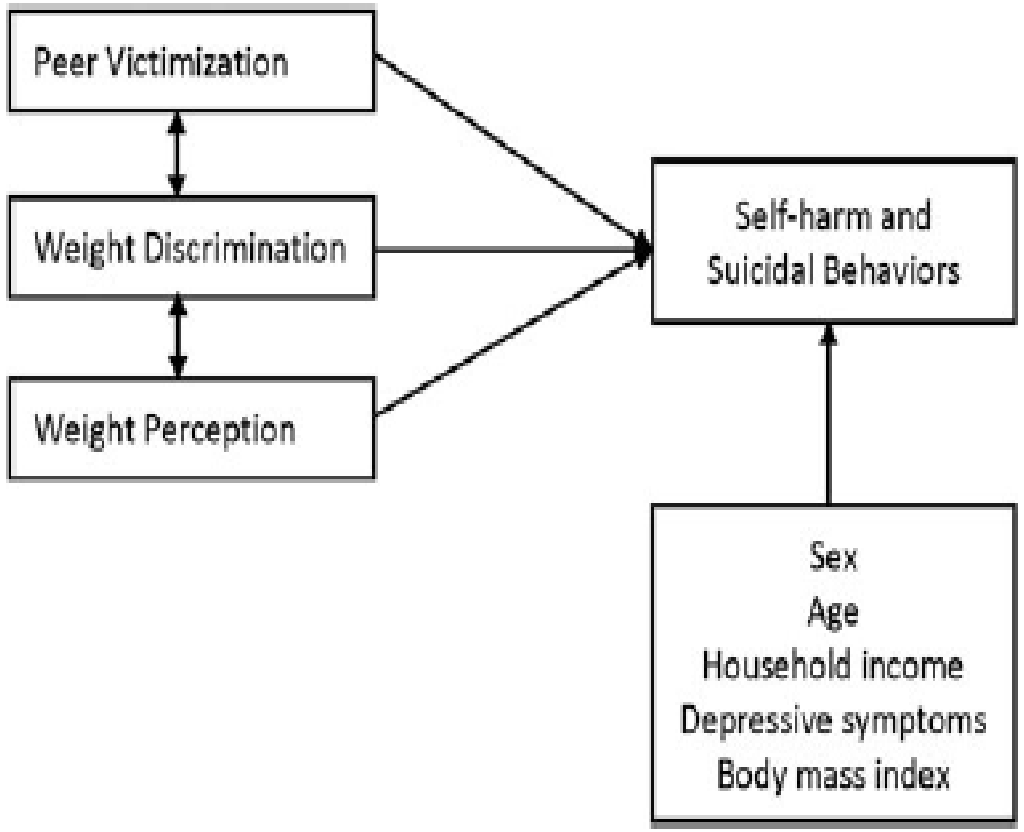


Table 3. Logistic Regression Predicting Suicidal Behaviors from Weight Discrimination *continued*

Predictors	Model 1	Model 2	Model 3
Perceived overweight[b]	–	–	2.25 (1.34–3.78)**
Perceived underweight[b]	–	–	2.67 (1.47–4.86)**
Weight discrimination	1.96 (1.30–2.96)**	1.23 (0.78–1.93)	1.65 (1.09–2.51)*
Sample size (N)	2946	2945	2944

Coefficients are odds ratios (95% confidence intervals) from logistic regression. Model 1 controls for sex, age, household income, depressive symptoms, and BMI weight category. Model 2 controls for Model 1 covariates and peer victimization. Model 3 controls for Model 1 covariates and perceived weight.

[a]The reference category is normal weight.

[b]The reference category is perceived about the right weight.

*$p < 0.05$.

**$p < 0.01$.

N= 3000 adolescents 14-15 ans

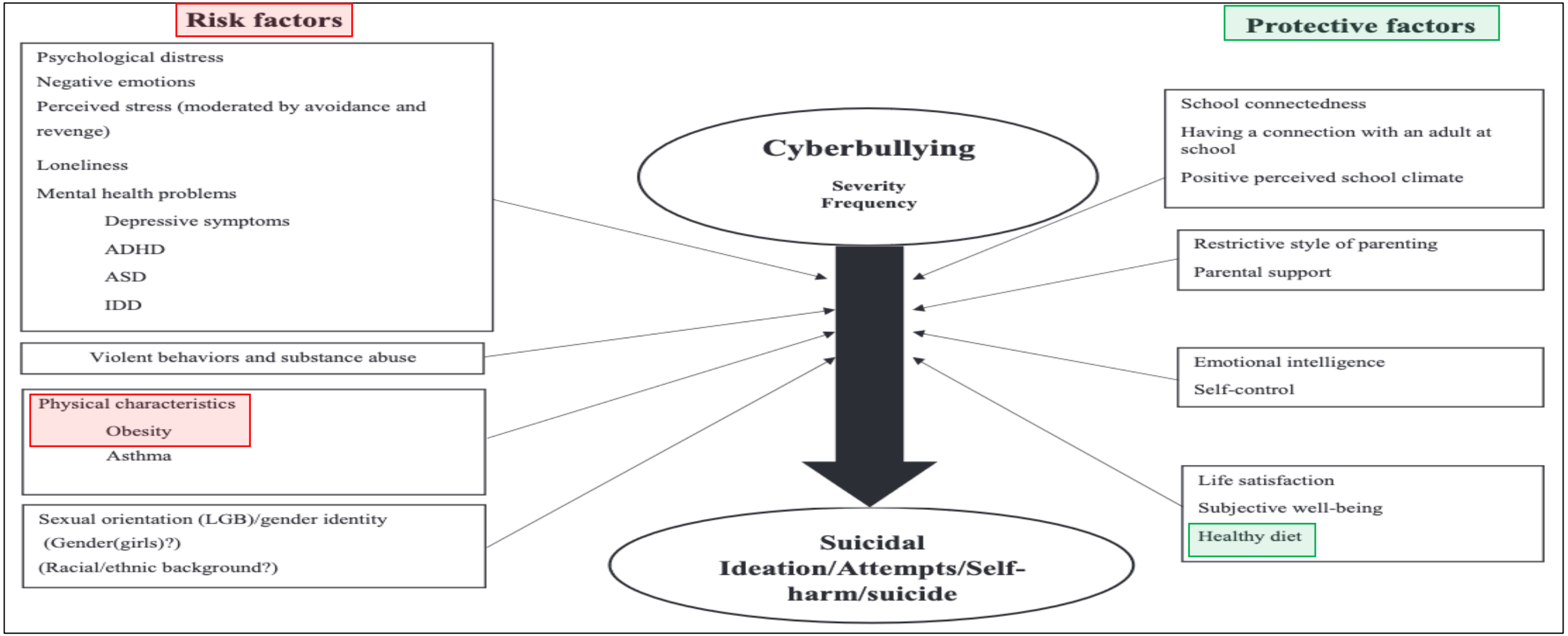
Genre et BMI
non associés aux conduites suicidaires

Obésité, harcèlement et risque suicidaire

Dorol-Beauroy-Eustache and Mishara. Prev Med. 2021 ;152(Pt 1):106684

Systematic review of risk and protective factors for suicidal and self-harm behaviors among children and adolescents involved with cyberbullying

Ophely Dorol–Beauroy-Eustache, Brian L. Mishara *



Sommeil, métabolisme et risque suicidaire

Amiri S. Postep Psychiatr Neurol. 2023 ;32(2):96-109
Udholm et al. Sleep. 2022 ;45(2):zsab286
Drager et al. J Am Coll Cardiol. 2013 ;62(7):569-76

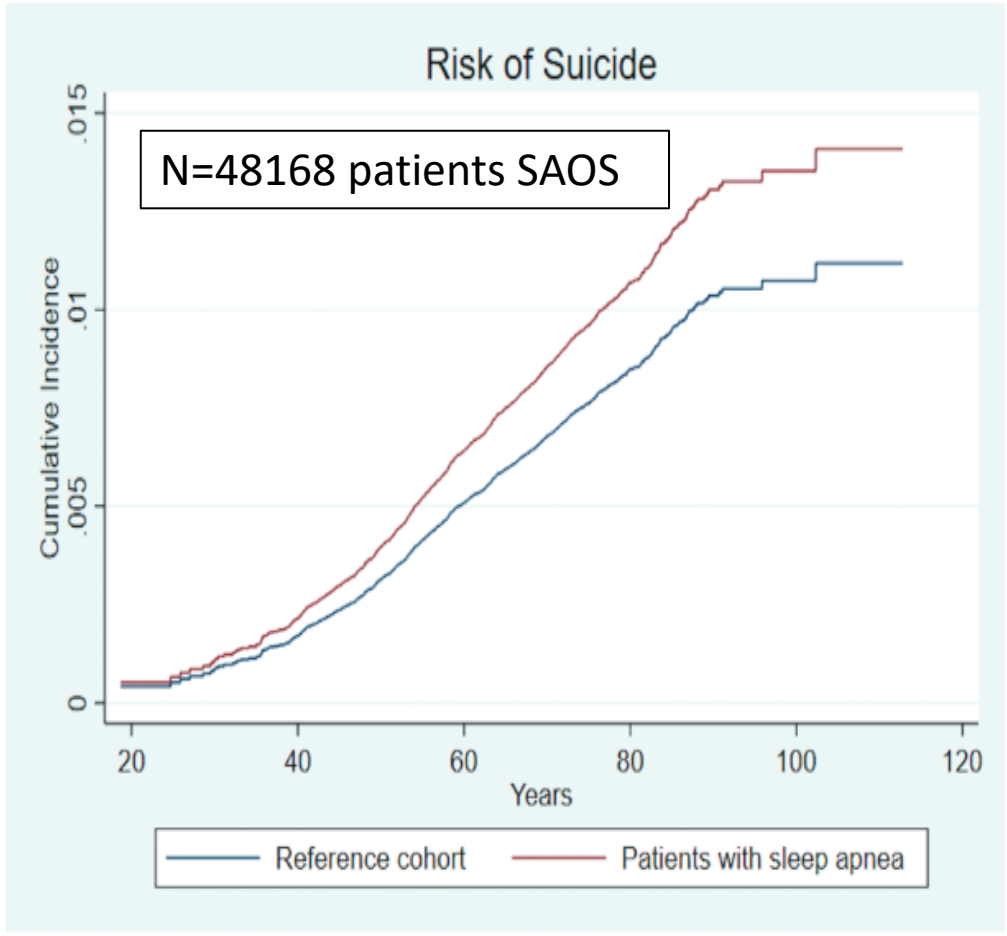
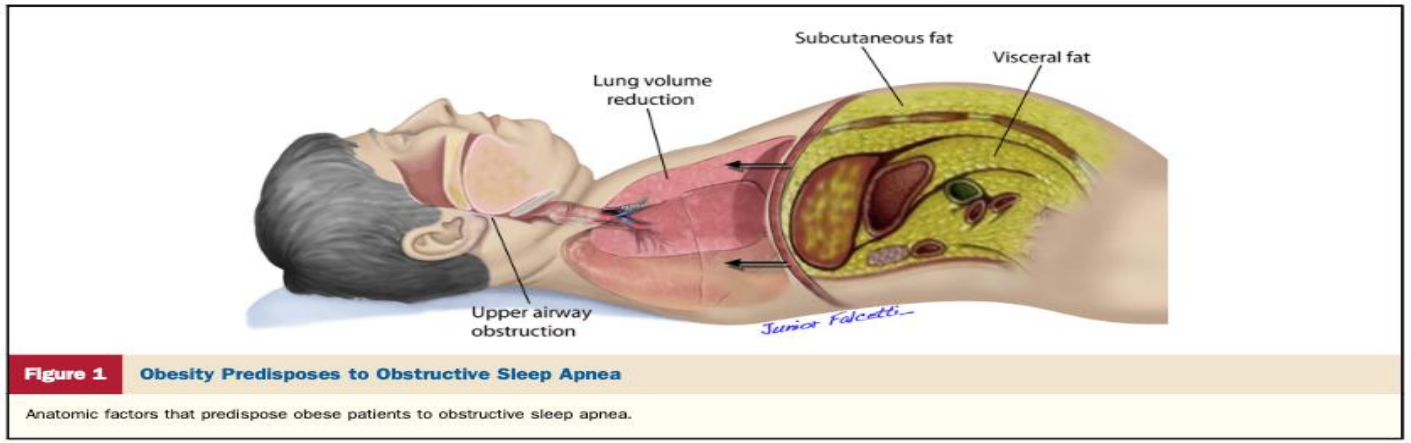


Figure 2. Cumulative incidence of suicide by time of diagnosis among patients with OSA.



Obstructive sleep apnea and risk of suicide and self-harm: a Danish Nationwide Cohort Study

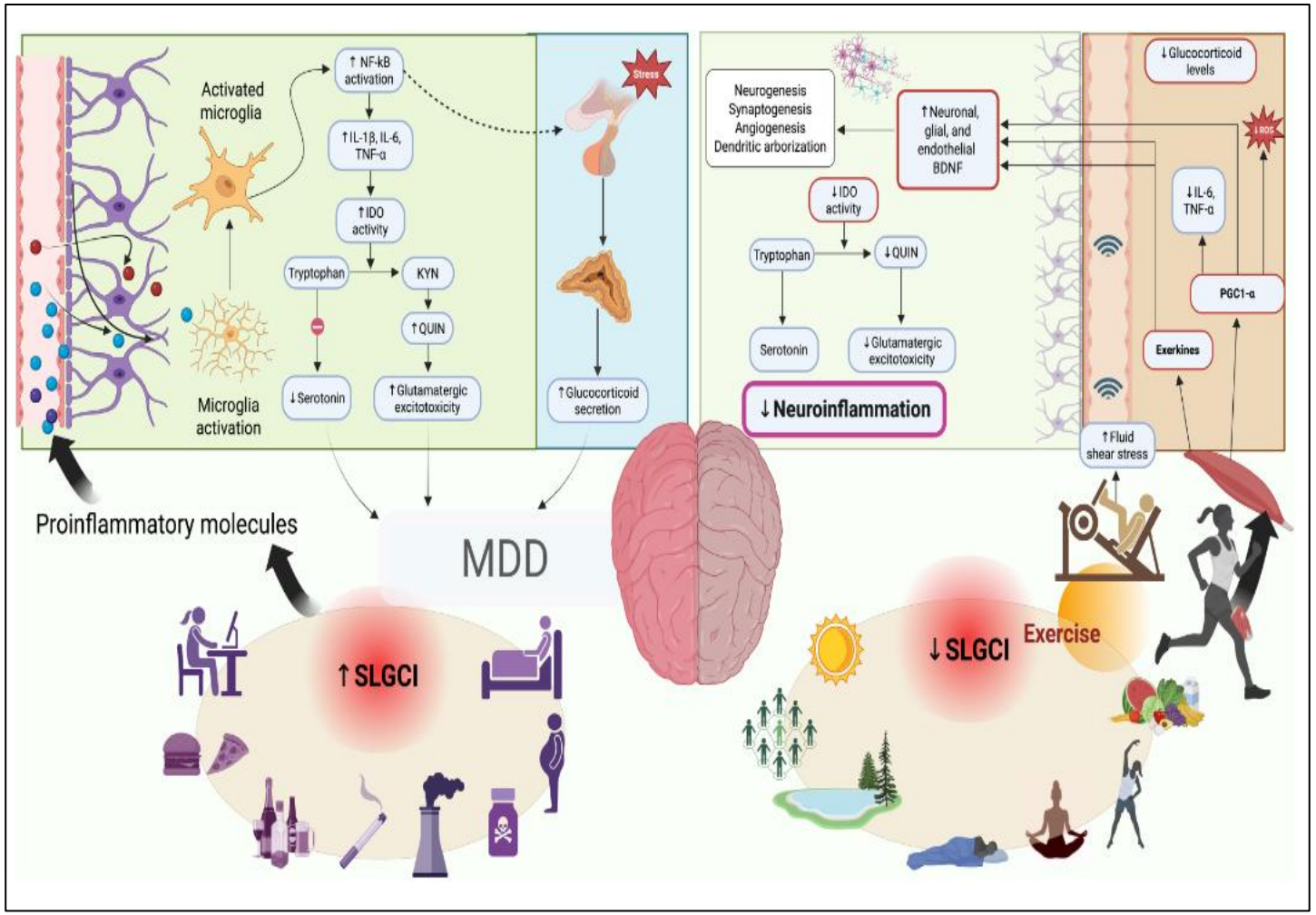
Nichlas Udholm[1,*], Milos Fuglsang[1], Søren Lundbye-Christensen[2], Jesper Bille[1] and Sebastian Udholm[1]

Table 2. Risk of suicide and self-harm in patients with OSA compared with matched references

Variable	No. of cases	SHR (95% CI)	HR (95% CI)	IRR (95% CI)
Suicide				
Patients with sleep apnea	135	1.23 (1.10–1.45)	1.29 (1.07–1.55)	1.34 (1.12–1.60)
Self-harm				
Patients with sleep apnea	1004	1.20 (1.08–1.33)	1.28 (1.19–1.37)	1.58 (1.52–1.64)

Obésité, métabolisme et risque suicidaire

En pratique ? *L'activité physique et le sommeil*



Carrera-Bastos P et al. Front Psychol. 2025 ;16:1554062

Inflammation and depression: an evolutionary framework for the role of physical activity and exercise

Forest plot of studies comparing suicidal risk (SI) between those who are active versus inactive

Study name	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value
Jia 2016	0.820	0.676	0.994	-2.017	0.044
MacKinnon 2016 [moderate]	0.700	0.404	1.212	-1.273	0.203
MacKinnon 2016 [active]	1.400	0.895	2.189	1.476	0.140
Lee 2013 [men]	0.990	0.881	1.112	-0.170	0.865
Lee 2013 [women]	1.100	0.960	1.260	1.374	0.169
Babiss 2009	0.950	0.887	1.017	-1.475	0.140
Taliaferro 2009 [men]	0.650	0.529	0.799	-4.101	0.000
Taliaferro 2009 [women]	0.700	0.599	0.818	-4.476	0.000
Brown 2007 [men]	0.580	0.372	0.905	-2.402	0.016
Brown 2007 [women]	1.120	0.741	1.693	0.538	0.591
Tao2007	0.950	0.751	1.202	-0.428	0.669
Brown 2002	0.870	0.466	1.625	-0.437	0.662
Unger 1997 [men]	0.480	0.368	0.626	-5.406	0.000
Unger 1997 [women]	1.250	1.021	1.531	2.157	0.031
	0.867	0.763	0.985	-2.186	0.029

Odds ratio and 95% CI

0.1 0.2 0.5 1 2 5 10

Decreased SI Increased SI

Vancampfort D et al. J Affect Disord. 2018 ;225:438-448

Obésité, métabolisme et risque suicidaire

En pratique ? *L'alimentation*

Sublette ME et al. Mol Psychiatry. 2024 ;29(2):269-286

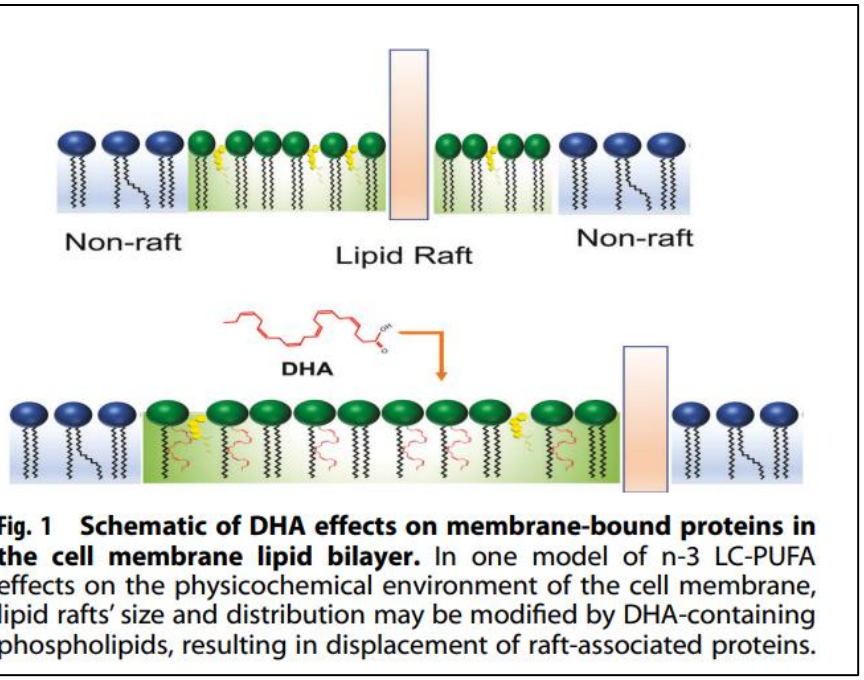


Fig. 1 Schematic of DHA effects on membrane-bound proteins in the cell membrane lipid bilayer. In one model of n-3 LC-PUFA effects on the physicochemical environment of the cell membrane, lipid rafts' size and distribution may be modified by DHA-containing phospholipids, resulting in displacement of raft-associated proteins.

The role of polyunsaturated fatty acids in the neurobiology of major depressive disorder and suicide risk

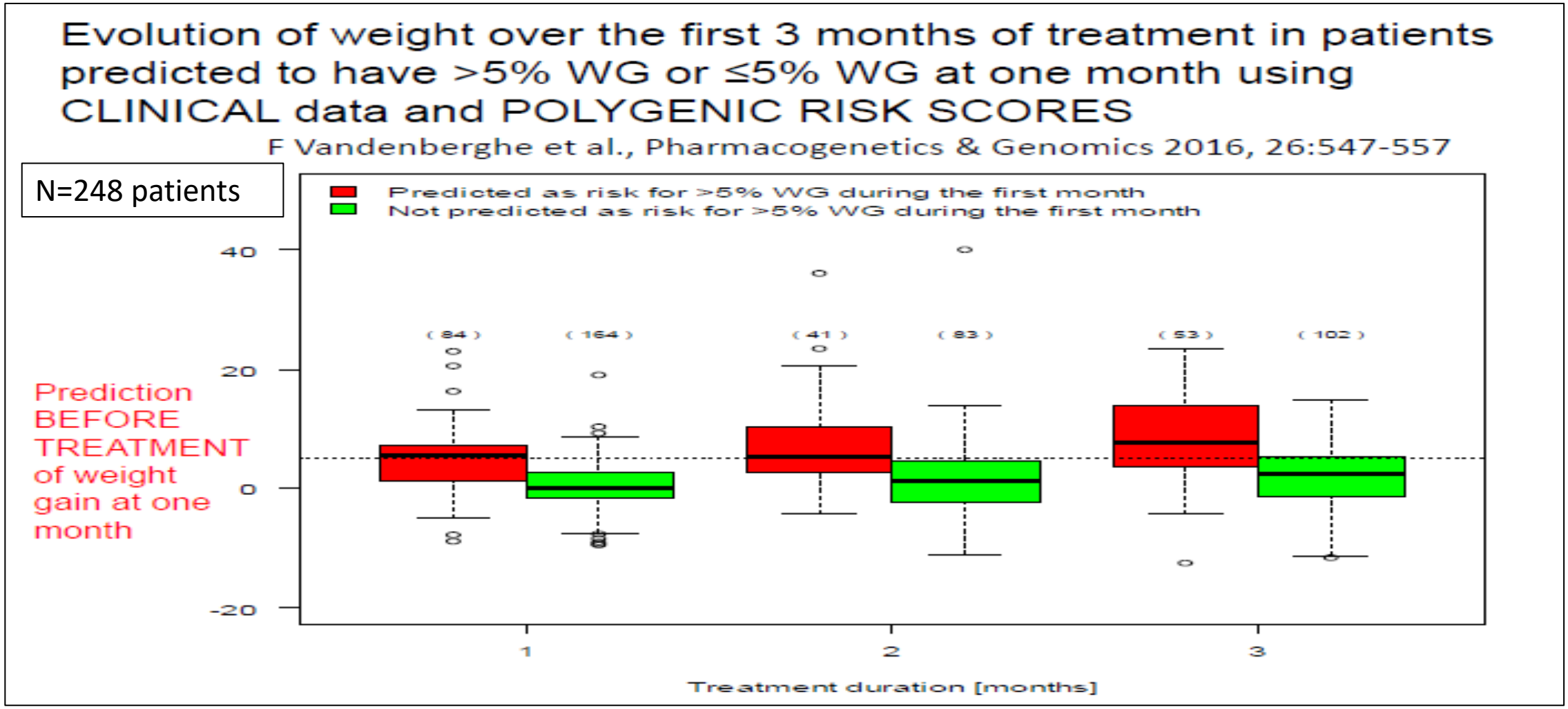
M. Elizabeth Sublette[1,2]✉, Federico Manuel Daray[3,4], Licínia Ganança[5,6] and Saame Raza Shaikh[7]

Table 2. Putative genotypic and phenotypic identifiers for individuals with major depression who may benefit most from LC-PUFA supplementation.

Characteristic	Risk Indicator
Diet	Low n-3 LC-PUFA intake
PUFA status	Low plasma/erythrocyte/plasma phospholipid levels of PUFAs
Inflammatory status	CRP
Oxidation status	Presence of late-stage peroxidation markers: • malondialdehyde (MDA), • 4-hydroxy-2- nonenal (4-HNE) • 8-isoprostane (8-ISO)
Genotype	*FABP* genotype *ELOVL* genotype *FADS1* (GG at rs174537 is associated with higher circulating levels of AA) *FADS1-FADS2* haplotype *SIRT1* (rs12415800) *SIRT1* haplotype 2
Clinical status	Major depressive episode Suicide history Alcohol use disorder

Obésité, métabolisme et risque suicidaire : En pratique ? *Les psychotropes*

Vandenberghe et al. Pharmacogenet Genomics. 2016 ;26(12):547-557



Communication orale Chin Eap APA Annual Meeting 8 mai 2018 NYC

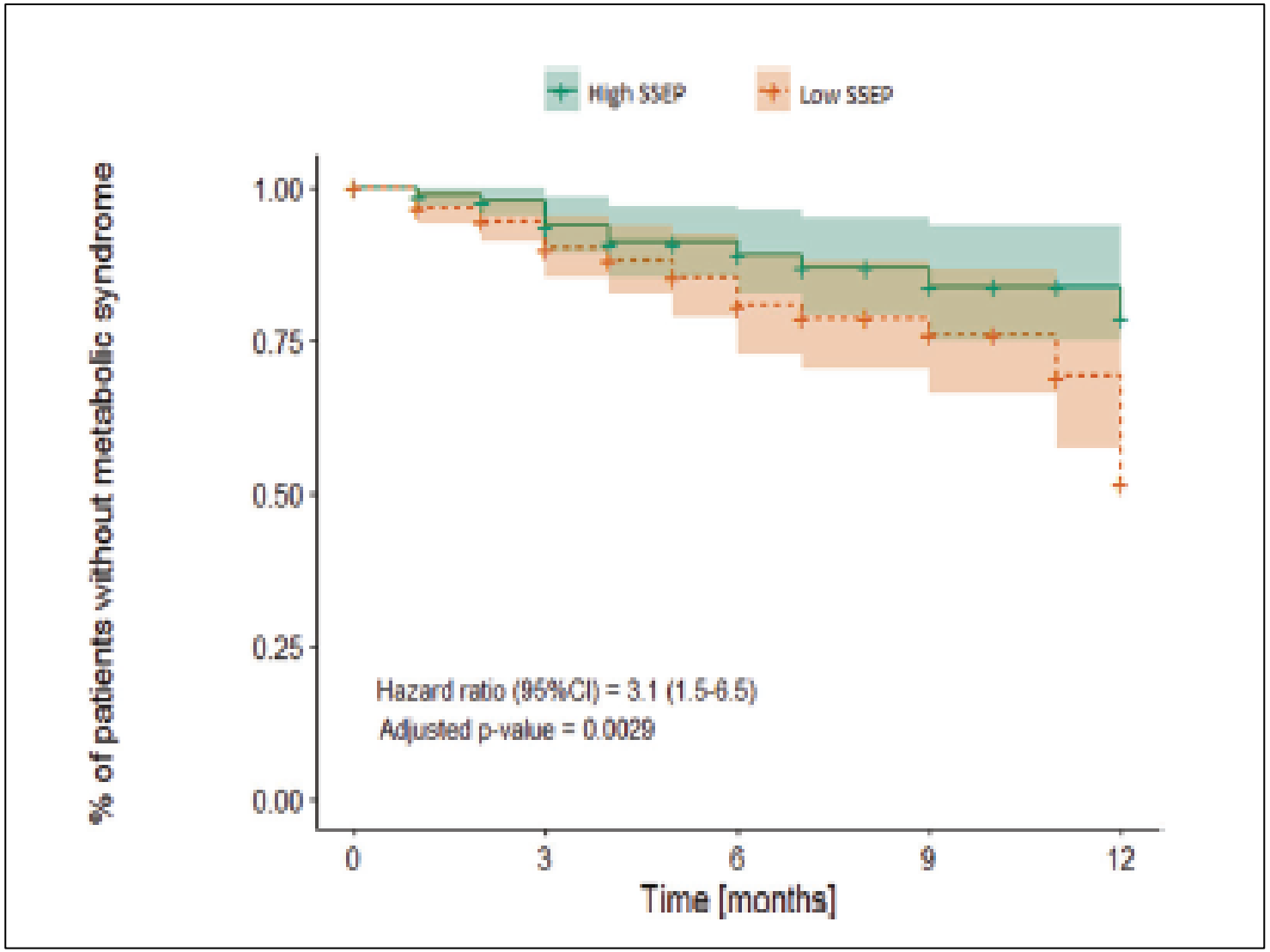
Obésité, métabolisme et risque suicidaire : En pratique ? *Les psychotropes*

Socio-economic position as a moderator of cardiometabolic outcomes in patients receiving psychotropic treatment associated with weight gain: results from a prospective 12-month inception cohort study and a large population-based cohort

Céline Dubath[1,16], Mehdi Gholam-Rezaee[2,16], Jennifer Sjaarda[1,3], Axel Levier[1], Nuria Saigi-Morgui[1], Aurélie Delacrétaz[1], Anaïs Glatard[1], Radoslaw Panczak[4], Christoph U. Correll[5,6,7], Alessandra Solida[8], Kerstin Jessica Plessen[9], Armin von Gunten[10], Zoltan Kutalik[3,11], Philippe Conus[8,15] and Chin B. Eap[1,12,13,14,15]

N=526
25<Age<65

Dubath et al. Transl Psychiatry. 2021 ;11(1):360



Obésité, métabolisme et risque suicidaire

En pratique ? *Les psychotropes*

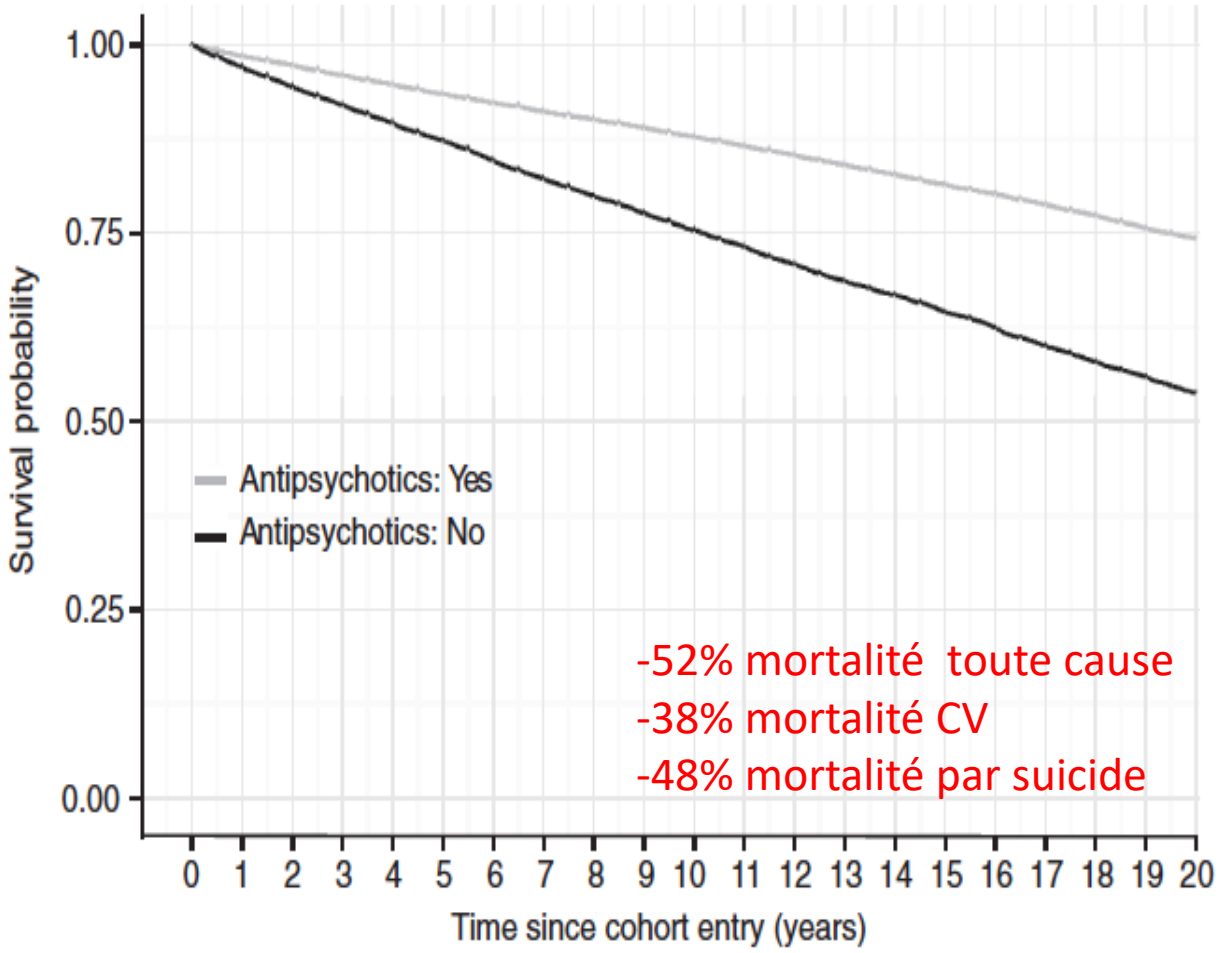
20-year follow-up study of physical morbidity and mortality in relationship to antipsychotic treatment in a nationwide cohort of 62,250 patients with schizophrenia (FIN20)

Heidi Taipale[1-3], Antti Tanskanen[1,2,4], Juha Mehtälä[5], Pia Vattulainen[5], Christoph U. Correll[6-9], Jari Tiihonen[1,2,10]

Taipale et al. World Psychiatry. 2020 ;19(1):61-68
Solmi and Correll. Eur Neuropsychopharmacol. 2022 ;62:1-3
Strømme et al. Schizophr Res. 2021 ;235:29-35
Tiihonen et al. Am J Psychiatry. 2016;173(6):600-6

N=62250 patients souffrant de SCZ
Suivi médian 14 années

Quand la clinique le requiert…
Plutôt traiter que s'abstenir…



All-cause mortality in patients using any antipsychotic versus those who used none in the prevalent cohort

Obésité, métabolisme et santé mentale
En pratique ? *Les molécules d'avenir*

Overlap fréquent entre altérations de santé mentale et obésité

- dépression ↔ obésité
- anxiété, traumatismes, stress chronique, addictions, hyperphagie/TCA et obésité

Disse E et al. ; SEMAFEAP Study Group. Diabetes Metab. 2025;51(3):101625
Carmellini P et al. Life (Basel). 2025 ;15(9):1422
Wong S et al. J Affect Disord. 2026 ;395(Pt B):120783
Ueda P et al. JAMA Intern Med. 2024 ;184(11):1301-1312

Review Article

The association between depressive symptom severity and metabolic disturbances in major depressive and bipolar disorders: A systematic review and meta-analysis

Sabrina Wong [a,b,c], Gia Han Le [a,b,d], Hernan F. Guillen-Burgos [f,g,h], Roger Ho [i,j,k], Bing Cao [l], Heidi K.Y. Lo [m], Kayla M. Teopiz [a,b,d], Roger S. McIntyre [c,e,*]

We identify an association between depressive symptom severity and dysglycemia, dyslipidemia and insulin resistance.
The results...support testing that therapeutics currently in development in the treatment of depression (e.g., GLP-1 RA) may exhibit differential efficacy as a function of illness severity

Evaluation et accompagnement pluridisciplinaire clinique et pharmacologique++++

Review

GLP-1 Receptor Agonists in Mood Disorders: A Psychiatric Perspective

Pietro Carmellini *, Alessandro Cuomo, Maria Beatrice Rescalli and Andrea Fagiolini

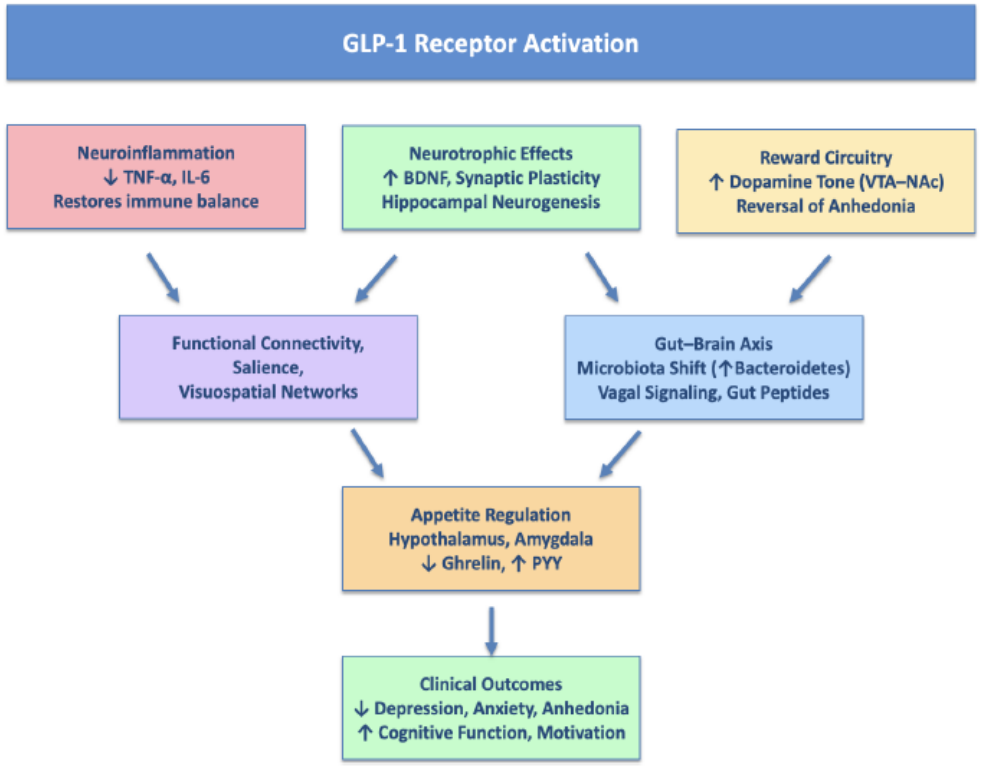


Figure 1. Main hypotheses for psychotropic action of GLP-1 Ras.

Obésité, Dysrégulations Métaboliques et Conduites Suicidaires

- ✓ *Instabilité pondérale*
- ✓ *Syndrome métabolique / Insulino-résistance*
- ✓ *Troubles du sommeil, notamment un SAOS*

*Take home message

- ***Obésité et dysrégulations métaboliques forment un terrain inflammatoire et émotionnel singulier, dessinant un véritable phénotype somato-psychique de vulnérabilité suicidaire***

- ***Les liens sont complexes et intégratifs : inflammation, lipides, insulino-résistance, sommeil, émotions et affects, traumatismes, stigmatisation***

- ***La pratique clinique doit associer approche relationnelle et interventions thérapeutiques centrées sur le patient, dans un dialogue pluridisciplinaire étroit avec la médecine cardio-métabolique et nutritionnelle***

Le métabolisme n'est pas «périphérique» en suicidologie, mais constitue un domaine crucial de vulnérabilité

Merci pour votre attention

afpbn

Médecine Psychosomatique
Section de l'AFPBN

CHU Centre Hospitalier Universitaire Dijon Bourgogne

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La science pour la santé
From science to health

CTM
Center for Translational and Molecular medicine

PADYS
Pathophysiology of Dyslipidemia