LE SYNDROME MÉTABOLIQUE DANS LE SOIN COURANT EN PSYCHIATRIE

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MORTALITÉ EN PSYCHIATRIE

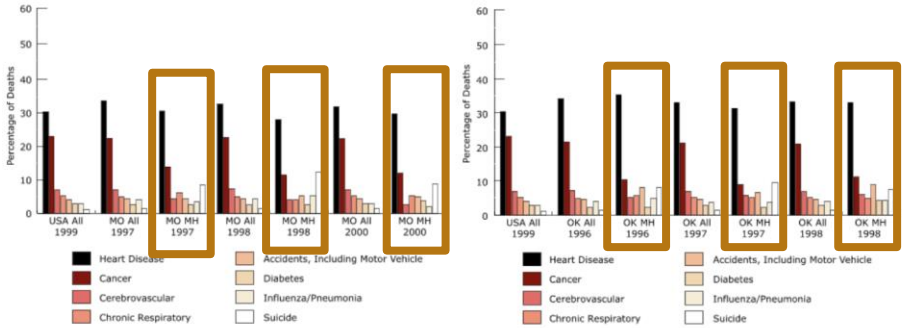


Figure 1. Leading causes of death in general populations (All) and public mental health clients (MH) nationwide and statewide in Missouri, 1997 to 2000.

Figure 2. Leading causes of death in general populations (All) and public mental health clients (MH) nationwide and statewide in Oklahoma, 1996 to 1998.

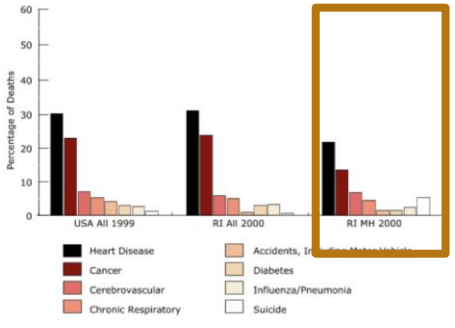


Figure 3. Leading causes of death in general populations (All) and public mental health clients (MH) nationwide and statewide in Rhode Island, 1999 and 2000.

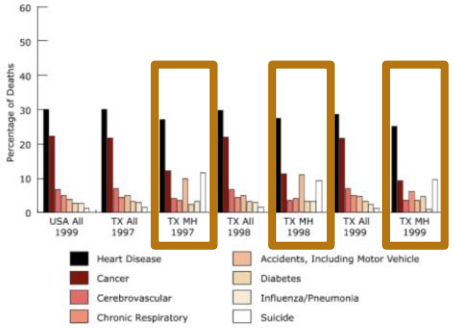


Figure 4. Leading causes of death in general populations (All) and public mental health clients (MH) nationwide and statewide in Texas, 1997 to 1999.

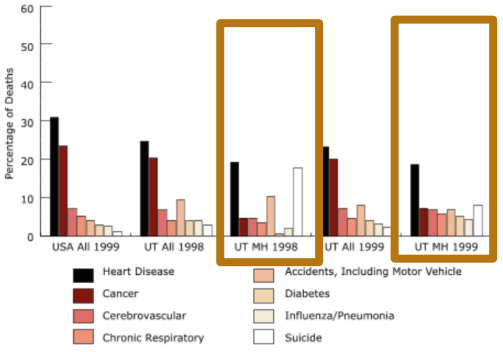


Figure 5. Leading causes of death in general populations (All) and public mental health clients (MH) nationwide and statewide in Utah, 1998 to 1999.

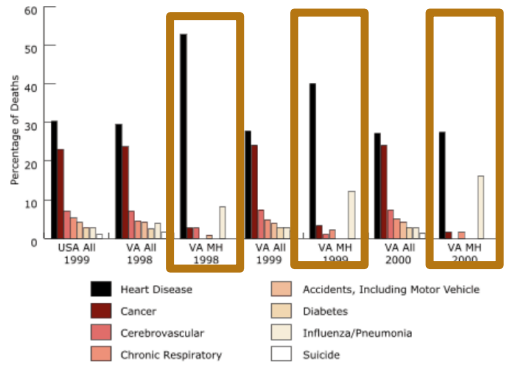


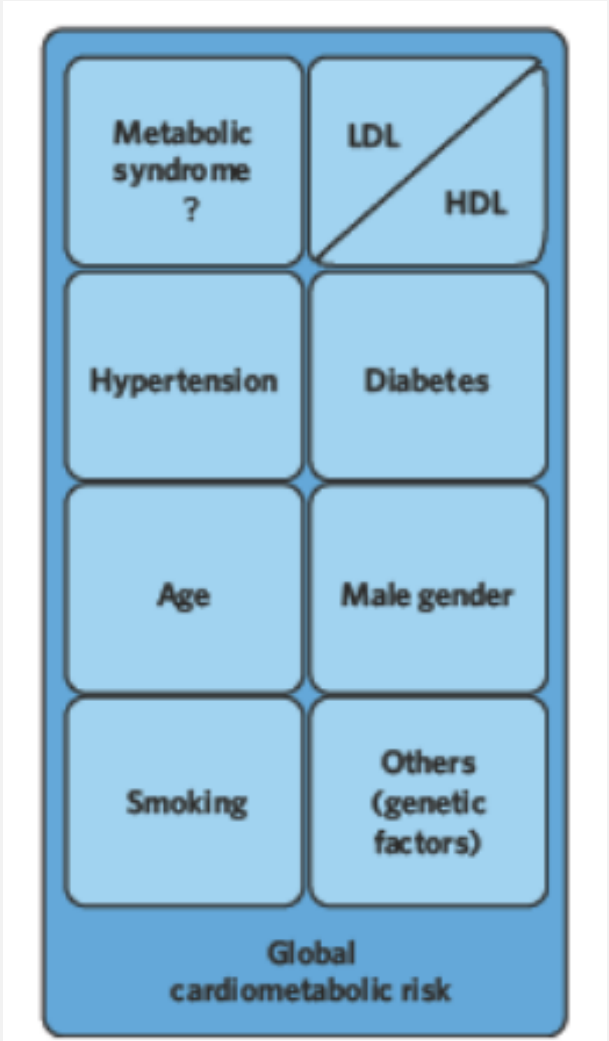
Figure 6. Leading causes of death in general populations (All) and public mental health clients (MH) nationwide and statewide in Virginia, 1998 to 2000.

Colton et al. 2006

FACTEURS DE RISQUE CARDIOVASCULAIRE

Population psychiatrique = population à risque

=> Tabac, sédentarité, surpoids etc…



Déprès et al. 2006

DÉFINITION

Table 5 International Diabetes Federation metabolic syndrome worldwide definition

Central obesity	Waist circumference*†—ethnicity specific (see Table 7) plus any two of the following:
Raised triglycerides	≥ 1.7 mmol/l (150 mg/dl) or specific treatment for this lipid abnormality
Reduced HDL-cholesterol	< 1.03 mmol/l (40 mg/dl) in males < 1.29 mmol/l (50 mg/dl) in females or specific treatment for this lipid abnormality
Raised blood pressure	Systolic: ≥ 130 mmHg or Diastolic: ≥ 85 mmHg or treatment of previously diagnosed hypertension
Raised fasting plasma glucose‡	Fasting plasma glucose ≥ 5.6 mmol/l (100 mg/dl) or previously diagnosed Type 2 diabetes If > 5.6 mmol/l or 100 mg/dl, oral glucose tolerance test is strongly recommended but is not necessary to define presence of the syndrome

*For guidelines on how to measure waist circumference accurately, see Table 7.
†If body mass index is > 30 kg/m^2 then central obesity can be assumed, and waist circumference does not need to be measured.
‡In clinical practice, impaired glucose tolerance is also acceptable, but all reports of the prevalence of the metabolic syndrome should use only the fasting plasma glucose and presence of previously diagnosed diabetes to assess this criterion. Prevalences also incorporating the 2-h glucose results can be added as supplementary findings.

Table 6 Country/ethnic-specific values for waist circumference

Country/ethnic group		Waist circumference† (as measure of central obesity)
Europids*	Male	≥ 94 cm
	Female	≥ 80 cm
South Asians‡	Male	≥ 90 cm
	Female	≥ 80 cm
Chinese	Male	≥ 90 cm
	Female	≥ 80 cm
Japanese§	Male	≥ 85 cm
	Female	≥ 90 cm
Ethnic South and Central Americans		Use South Asian recommendations until more specific data are available
Sub-Saharan Africans		Use European data until more specific data are available
Eastern Mediterranean and Middle East		Use European data until more specific data are available (Arab) populations

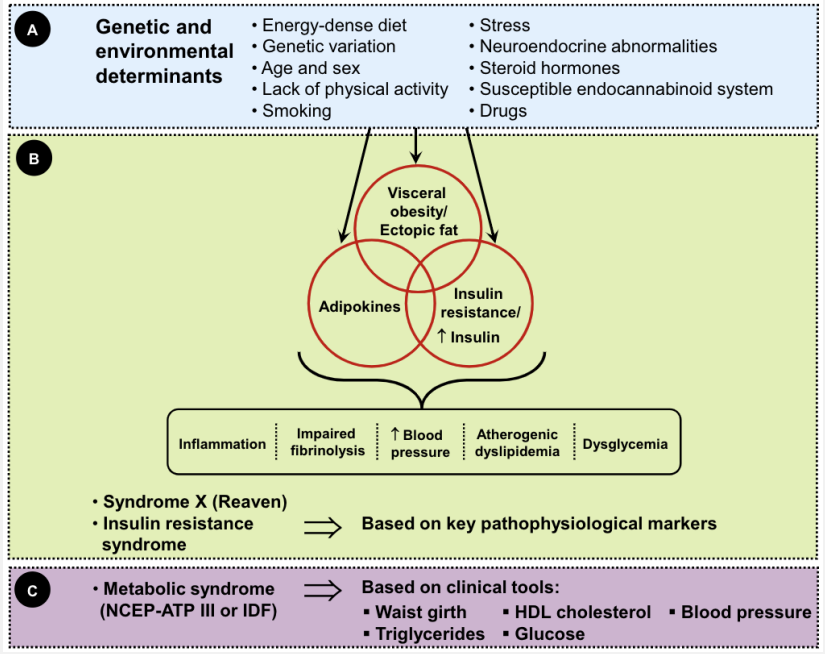
Alberti et al.2006

DÉFINITION

- USA: 25/30%
- France:
  - Homme: env. 10%
  - Femme 6/7%
  - <40ans: 5%: H et 2.2%: F

  => Effets lieux, âge, sexe++++

FACTEURS DE RISQUE

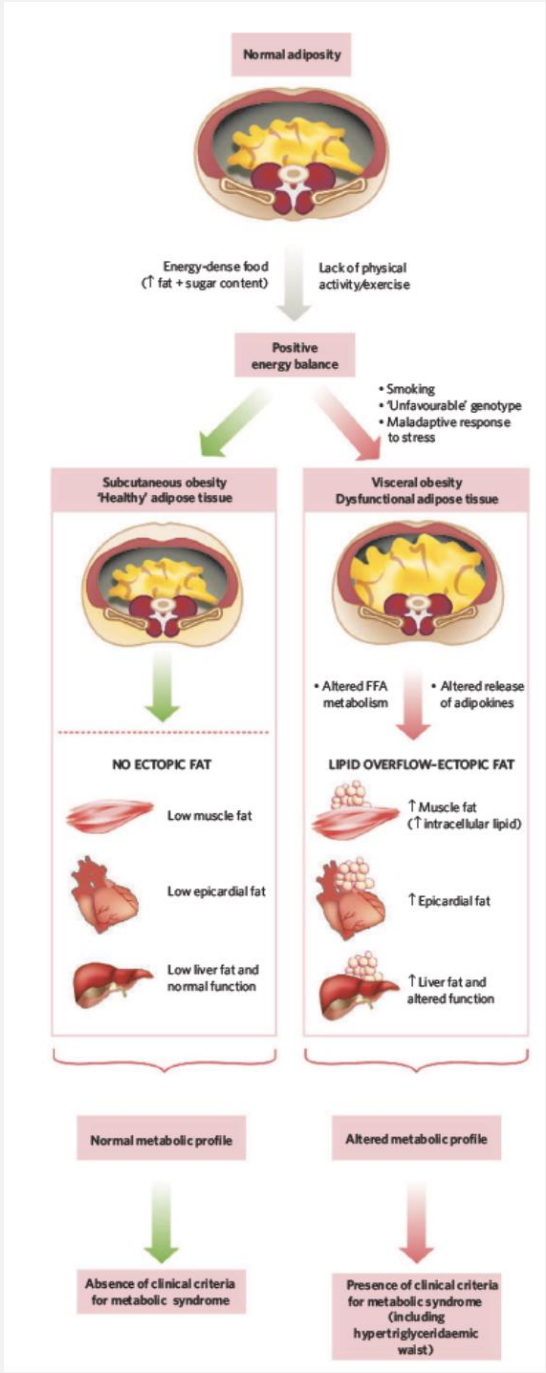


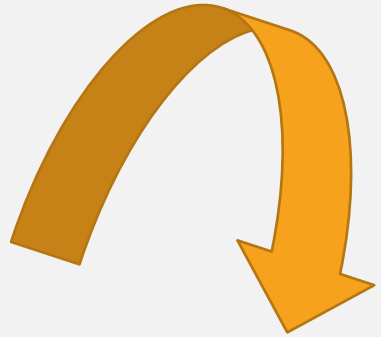
Després 2012

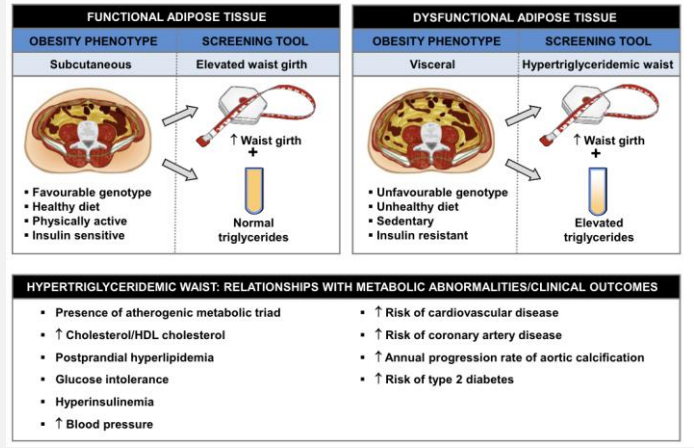
PHYSIOPATHOLOGIE

Rôle de l'obésité intra abdominale+++

=> Sd métabolique: Hypertriglycéridémie

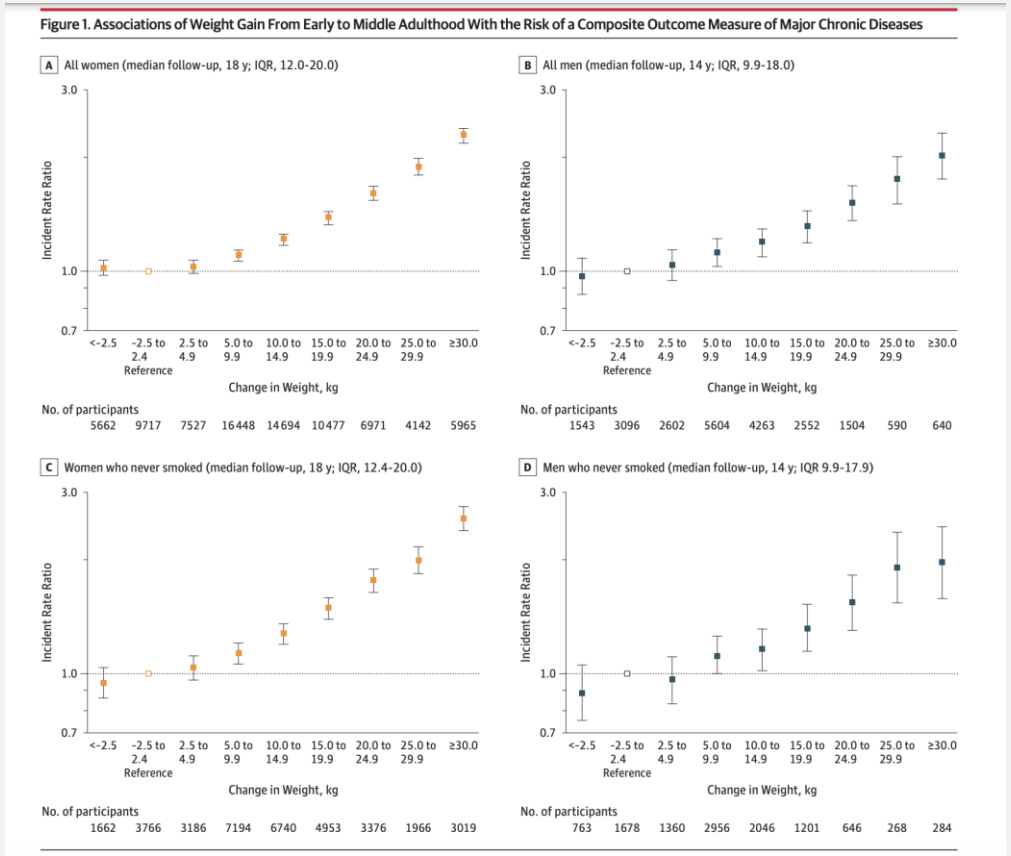






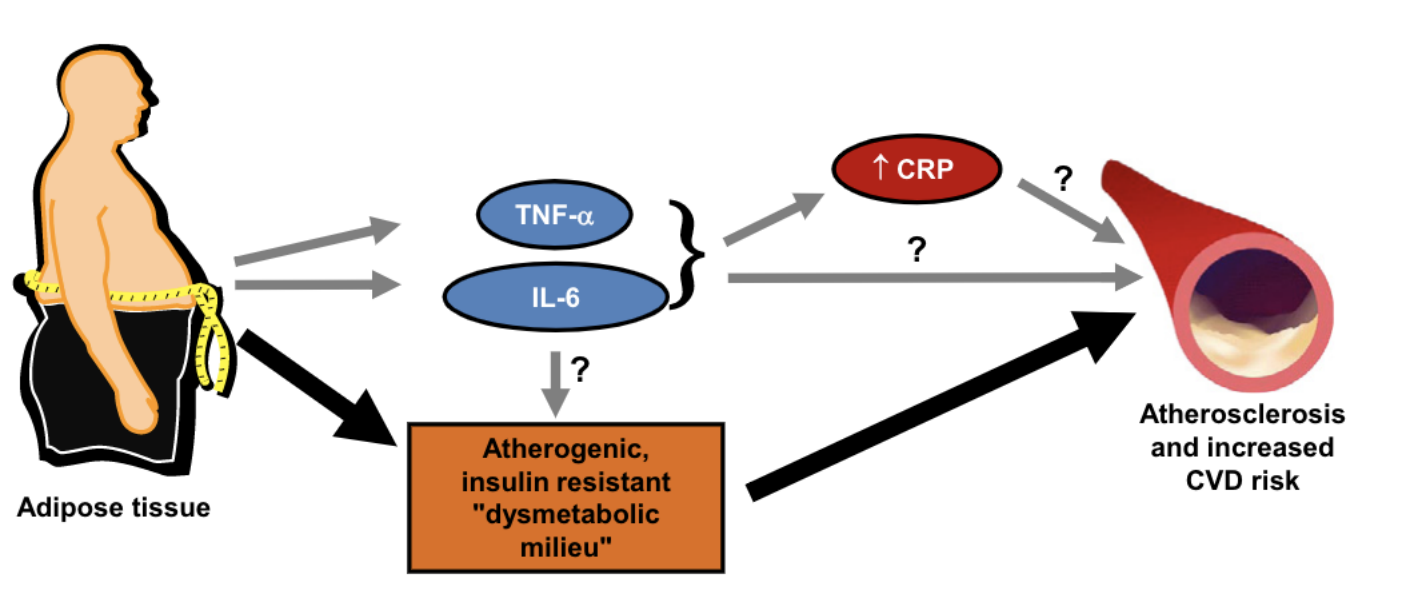
Després 2006,2012

PRISE DE POIDS ET RCV



Zheng et al. 2017

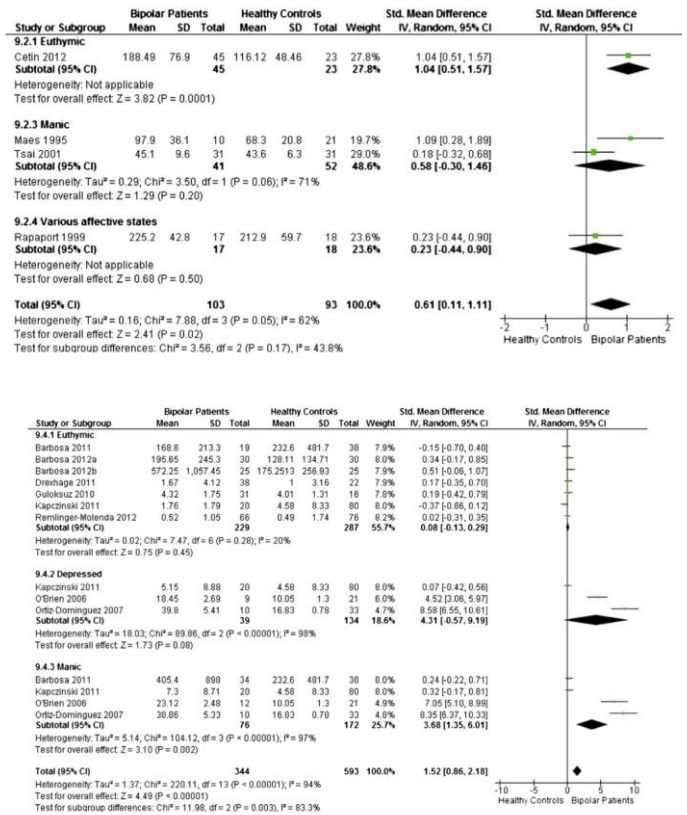
PHYSIOPATHOLOGIE



Després et al. 2012

PHYSIOPATHOLOGIE

TROUBLES BIPOLAIRES



Munkholm et al. 2013

SCHIZOPHRÉNIE

TABLE 1 | Summary of alterations in serum levels of cytokines in schizophrenia, based on meta-analyses [18, 20, 21).

Increased levels		Non-altered levels		Increased or non-altered		Increased or decreased or non-altered	
Cytokine	**Type**	**Cytokine**	**Type**	**Cytokine**	**Type**	**Cytokine**	**Type**
IL-6	PI	IL-2	TH1	IL-8	PI	IL-10	TR
TNF-α	PI	IL-4	TH2	IFN-γ	TH1		
IL-1β	PI	IL-17	TH17				
IL-12	TH1						
TGF-β	TR						

IL, interleukin; TNF, tumor necrosis factor; TGF, transforming growth factor; IFN, interferon; PI, pro-inflammatory cytokine; TH1, T-helper 1 cytokine; TH2, T-helper 2 cytokine; TR, T-regulatory cytokine; TH17, T-helper 17 cytokine.

Momtazmanesh et al. 2019

SYNDROME MÉTABOLIQUE ET TROUBLE BIPOLAIRE

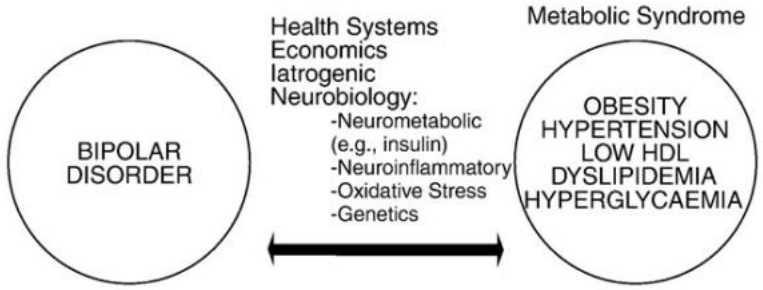
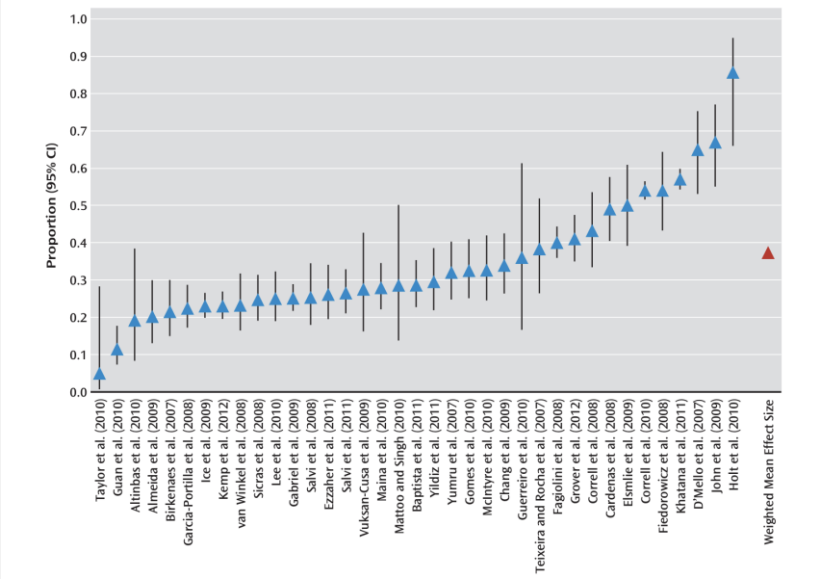
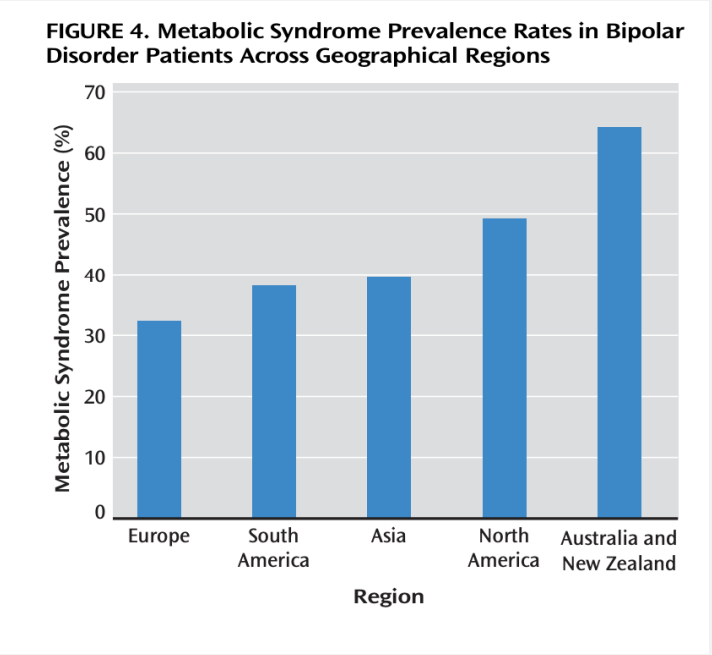


Fig. 2. Association between metabolic syndrome and bipolar disorder: mediating and moderating factors. Adapted from (Sarchiapone et al., 2001).

SYNDROME MÉTABOLIQUE ET TROUBLE BIPOLAIRE





McIntyre 2010, Vancampfort et al. 2013

SYNDROME MÉTABOLIQUE ET SCHIZOPHRÉNIE

- Environ 37%
- Obésité env. 50%
- Hyperglycémie env. 20%
- Hypertriglycéridémie env. 40%
- HTA en. 40%

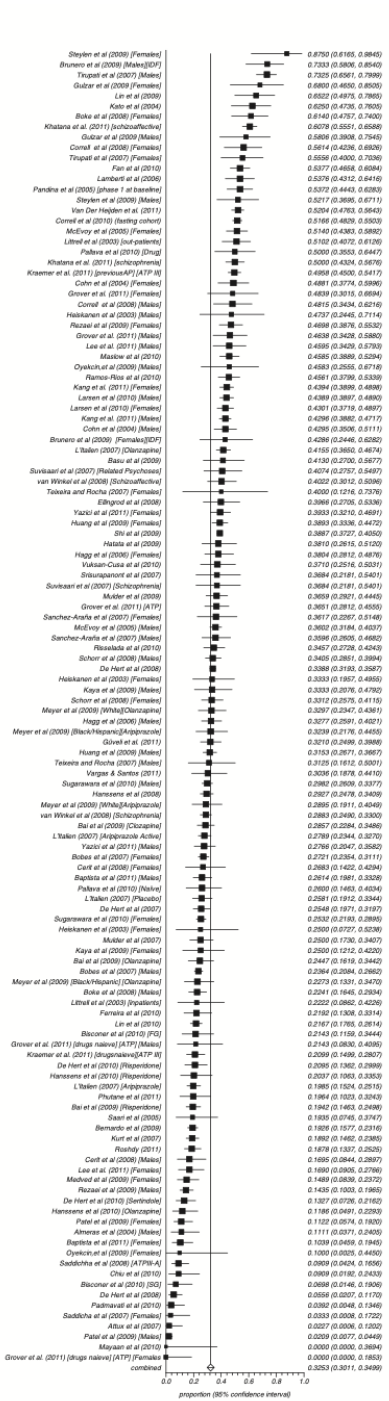


Fig. 2. Summary rate of metabolic.

Vancampfort et al. 2013

EN FRANCE?

- Santé publique+++
- Fréquent?
- Mais peu d'étude en psychiatrie….

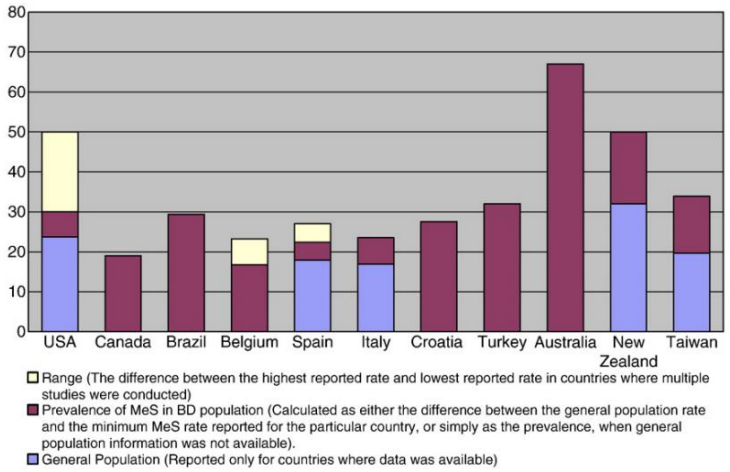


Fig. 1. Comparison of Mes prevalence rates in bipolar disorder by country.

Vancampfort et al. 2013

CENTRES EXPERTS FONDATION FONDAMENTAL

TROUBLES BIPOLAIRES

- Prévalence= 18.5%
  - 22.8%: H/ 15.5%F
- HTA= 34.6%
- Dyslipidémie= HDL bas: 32.8%/ Hyper Triglycéride: 28.9%
- Obésité abdominale= 35.5% (38.2% BMI>25 et 14.8% obèse)
- Hyper glycémie= 16.0%

SCHIZOPHRÉNIE

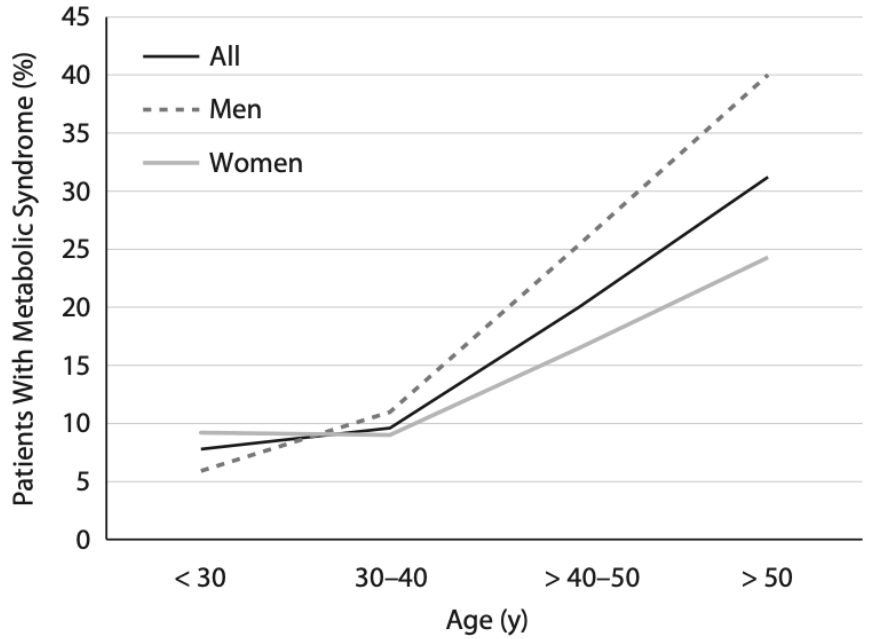
- Prévalence= 24.2%
- HTA= 34.8%
- Dyslipidémie= HDL bas: 42.3%/ Hyper Triglycéride: 28.3%
- Obésité abdominale= 39.8%
- Hyper glycémie= 19.9%

Godin et al. 2014, 2015

CENTRES EXPERTS FONDATION FONDAMENTAL

Rôle du sexe et de l'âge +++

Figure 1. Age-Specific Prevalence of Metabolic Syndrome[a] in Patients With Bipolar Disorder

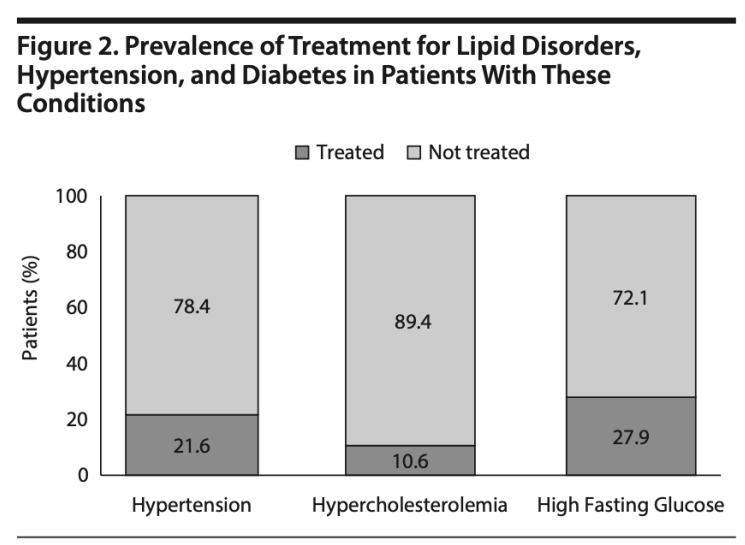


All	7.8	9.6	20.0	31.2
Men	5.9	11.0	25.4	40.0
Women	9.2	9.0	16.5	24.3

Godin et al. 2014

CENTRES EXPERTS FONDATION FONDAMENTAL

TROUBLES BIPOLAIRES



SCHIZOPHRÉNIE

- TTT adapté=
  - 10% HTA
  - 18% hyper glycémie
  - 8% dyslipidémie

Godin et al. 2014, 2015

CENTRES EXPERTS FONDATION FONDAMENTAL

- BIAIS DE RECRUTEMENT+++++
- Données identiques en population issue des soins courants?????

OBJECTIFS

- 1) Évaluer prévalence du syndrome métabolique en France en population présentant des troubles bipolaires et schizophréniques en soins courant
- 2) modification des pratiques en fonction des résultats

I ER VOLET

Évaluer la prévalence du syndrome métabolique

MÉTHODOLOGIE

- Population soins courants:

Centre Hospitalier Ariège Couserans

Centre Hospitalier du Gers

Centre Hospitalier de Lannemezan

Centre Hospitalier de Lavaur

Centre Hospitalier Gérard Marchant

Centre Hospitalier de Montauban

Centre Hospitalier Sainte-Marie de Rodez

Centre Hospitalo-Universitaire de Toulouse

Centre Hospitalier de Thuir

Centre Hospitalier François Tosquelles - EPSM Lozère

Clinique Beaupuy

Clinique d'Aufréry

Clinique des Cèdres

Clinique Château de Seysses

Clinique de Montberon

Clinique Marigny

Fondation Bon Sauveur d'Alby

ASEI Centre Paul Dottin

Institut Camille Miret

MGEN 31

ARSEAA

Fondation John Bost Lou Camin

Route Nouvelle

Association Audoise Sociale et Médicale

MÉTHODOLOGIE

- **Sondage en grappe**
  - Le sondage en grappe consiste à tirer au sort non pas directement un individu, mais des unités collectives (ici les établissements de la FERREPSY).
  - Sélection d'établissements de la FERREPSY qui formeront les grappes sur le critère tranches d'âge et genre, et constitueront les unités de sondage.
  - On interrogera seulement quelques "grappes" tirées au hasard (mais tous les individus appartenant aux grappes sélectionnées seront interrogés).

MÉTHODOLOGIE

- **Avantages:**
  - Réduire le temps de recrutement sur un centre (une grappe)
  - Être le plus exhaustif possible
- **Précautions:**
  - Nécessité de « calibrer » la grappe en fonction de la population de l'établissement: âge, sexe et file active (pathologies étudiées)
  - Attention à l'effet cluster

EN PRATIQUE

- Actuellement, état des lieux avec les DIM des établissements=> établir les grappes.
- Travail s/ le CRF de recueil des données
- Participation sur la base du volontariat
- Si volontaire, tirage au sort concernant:
  - la réalisation ou non d'une grappe
  - L'ordre de passage
- Photographie à un temps T = recueil de données
- Pas d'action particulière de la part des équipes

2ÈME VOLET

Modifications des pratiques si nécessaire

CONCLUSION

- Évaluer la prévalence du syndrome métabolique en « vie réelle »
- Avec pour objectifs:
  - D'améliorer nos pratiques
  - Donc la santé globale des patients