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# HEALTH OF SEXUALLY ABUSED CHILDREN COMPARED TO THE GENERAL POPULATION

results of a Quebec study on medical  
records from 1996 to 2013

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# COLLABORATORS

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# CONTEXT

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01

We know that sexual abuse during childhood and adolescence has a variety of negative mental health consequences for young people (Tyler, 2002)

02

More and more studies indicate that being exposed to sexual violence during childhood is also associated with an increased risk of physical health problems in adulthood (Irish, Kobayashi et Delahanty, 2010)

03

Little is known about the impact of childhood sexual abuse on the physical health of youth, as well as on some aspects of their mental health, such as serious mental disorders



# CONTEXT – PHYSICAL HEALTH

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04

A study of young Quebecers under youth protection indicates that the more they report a large number of adverse life events (**3+ = 40-58%**), the more their physical health is affected = 62% reported a chronic physical illness, compared to 15-20% for the general population (Lambert, Frappier, Duchesne, & Chartrand, 2015)

05

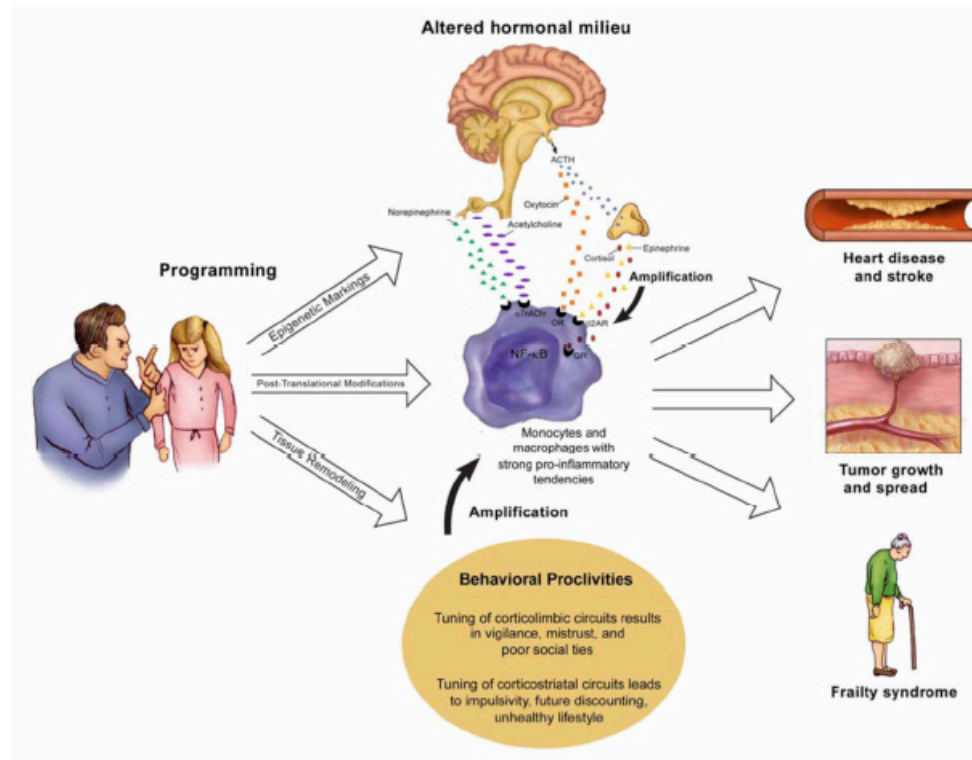
Teenage girls are up to 6 times more likely to report poor general health when exposed to romantic or sexual violence than their unexposed peers (Decker et al., 2014)

06

More general physical health problems, injuries, self-harm and hospitalizations when teenage girls involved in the justice system experience increased exposure to family violence, physical and sexual abuse during childhood (Odgers, Robins, & Russell, 2010).

07

Child abuse family studies find blood markers of pro-inflammatory reactions in participants exposed to maltreatment or harsh family climate (Bielas et al., 2012; Miller et Chen, 2010)



**Figure 1.**

The Biological Embedding of Childhood Adversity Model. ACTH = adrenocorticotrophic hormone;  $\alpha 7nAChR$  =  $\alpha 7$  subunit of nicotinic acetylcholine receptor;  $\beta 2AR$  =  $\beta 2$  adrenergic receptor; GR = glucocorticoid receptor; OR = oxytocin receptor.

Miller, G. E., Chen, E., & Parker, K. J. (2011). Psychological stress in childhood and susceptibility to the chronic diseases of aging: Moving toward a model of behavioral and biological mechanisms. *Psychological Bulletin*, 137(6), 959-997.



# HYPOTHESIS

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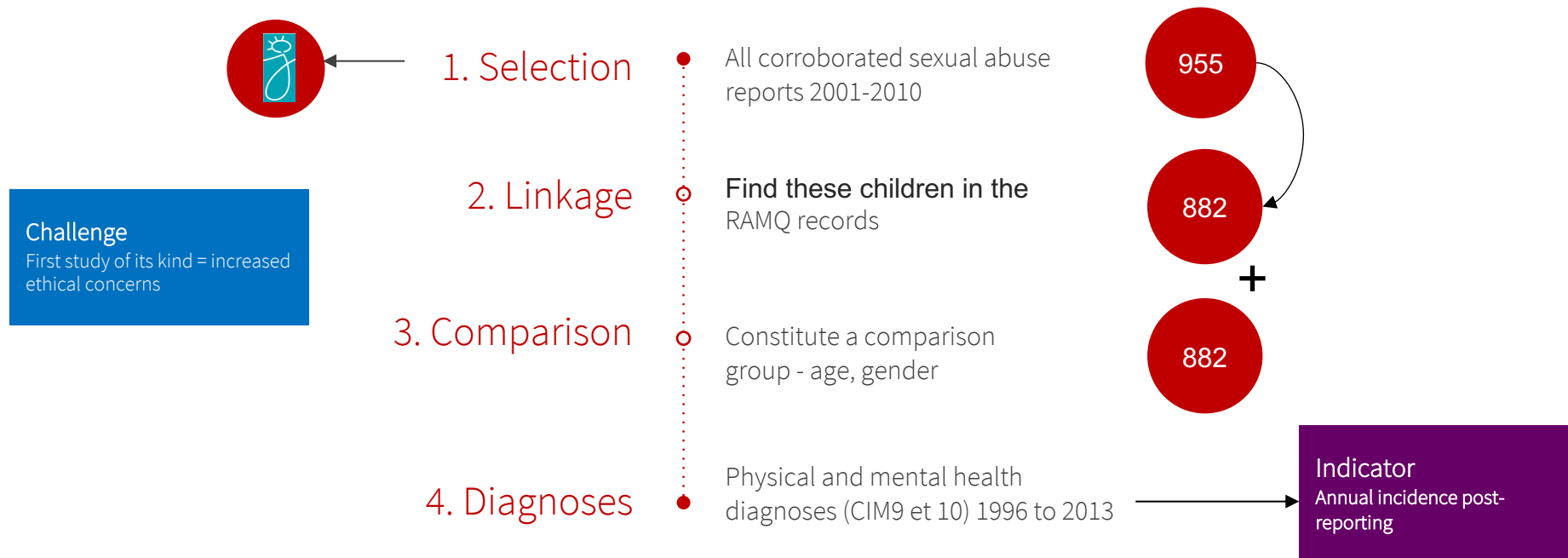
Sexually abused girls and boys will have more physical and mental health problems than their general population peers

Childhood sexual abuse has consequences for physical health, including mental health consequences for children and teenagers



# METHOD

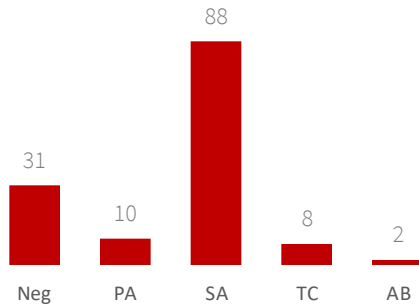
## Linkage of medical administrative and youth protection data



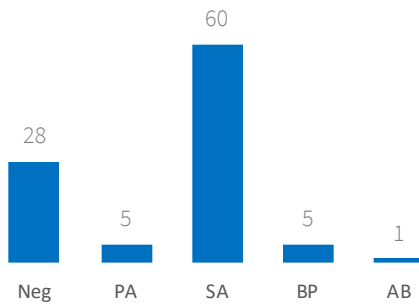


# METHOD

Other reports  
before 1st sexual abuse (AS)



Report/ reason at last  
intervention



## PARTICIPANTS

11 years

first report of sexual  
abuse

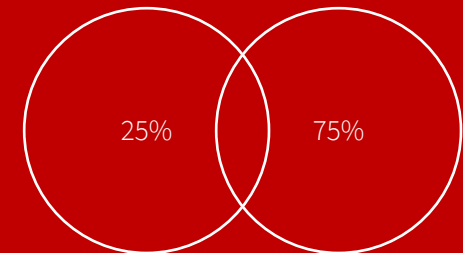
20½ year

at the end of the data  
extraction period

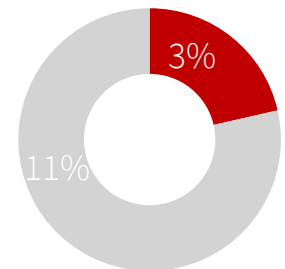
Youth protection interventions



Sample composition



First runaway  
**before** or after  
the first sexual  
abuse report







# RESULTS – PHYSICAL HEALTH

## OUTPATIENT CONSULTATIONS

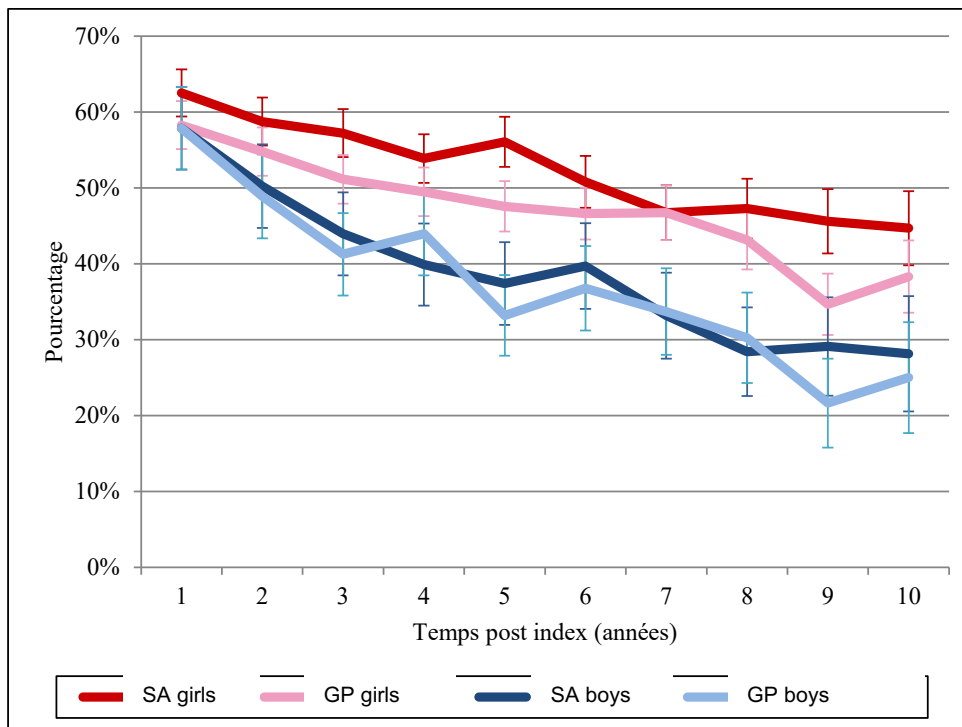
### Important points

1: High annual incidence

2: 20% more consultations among abused youth on average

3: Abused girls have 20% to 120% more consultations than abused boys after 5 years

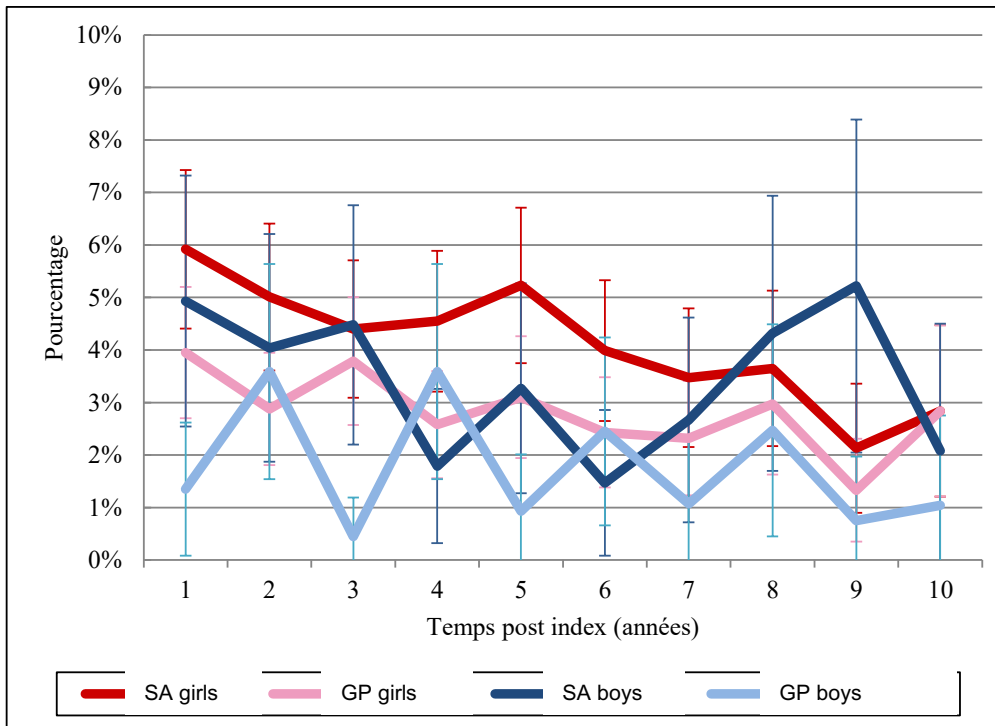
4: General decrease in annual incidence for all





# RESULTS – PHYSICAL HEALTH

## HOSPITALIZATIONS



### Important points

1: Low annual incidence

2: 60% more hospitalizations among abused youth on average

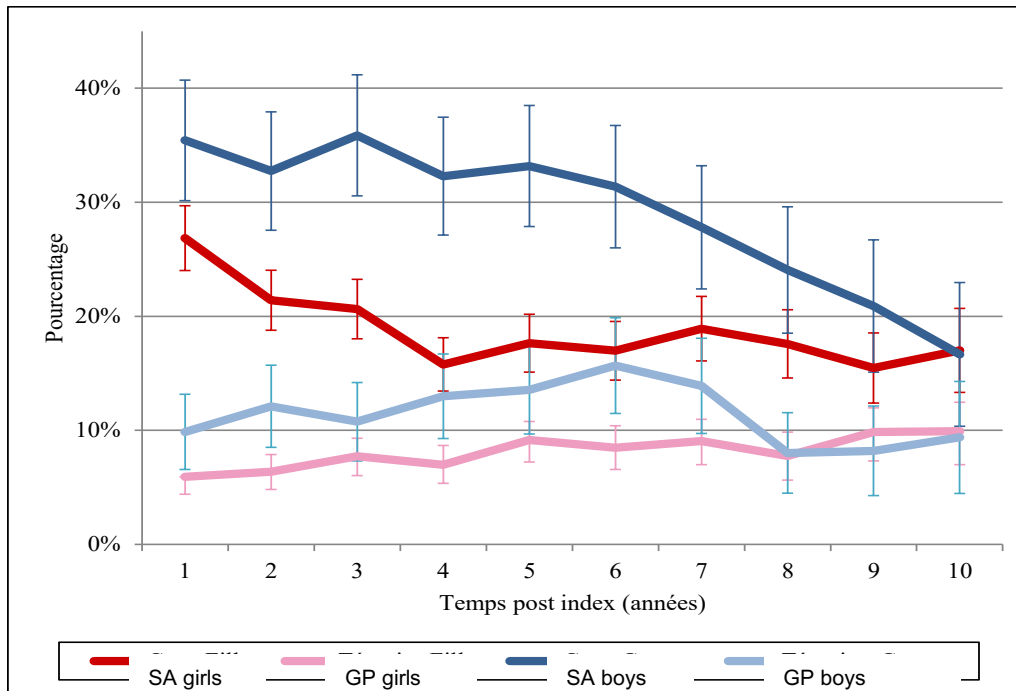
3: Similar annual incidence for abused boys and girls after 5 years

4: Stable overall annual incidence after 10 years



# RESULTS – MENTAL HEALTH

## OUTPATIENT CONSULTATIONS



### Important points

1 : High annual incidence among abused youth

2 : 90% to 450% more consultations among abused youth

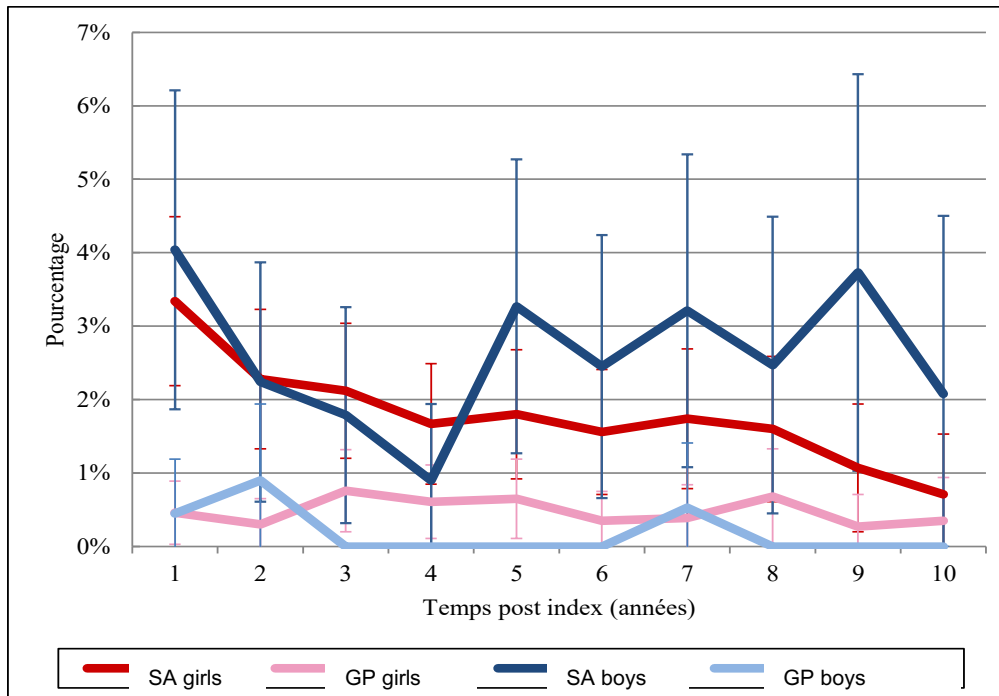
3 : Abused boys have 50% to 130% more consultations than abused girls after 5 years

4 : Average annual incidence stable after 10 years.  
Interaction effect = abused youth consult less frequently after 10 years even if always more than the general population



# RESULTS – MENTAL HEALTH

## HOSPITALIZATIONS



### Important points

1 : Low annual incidence

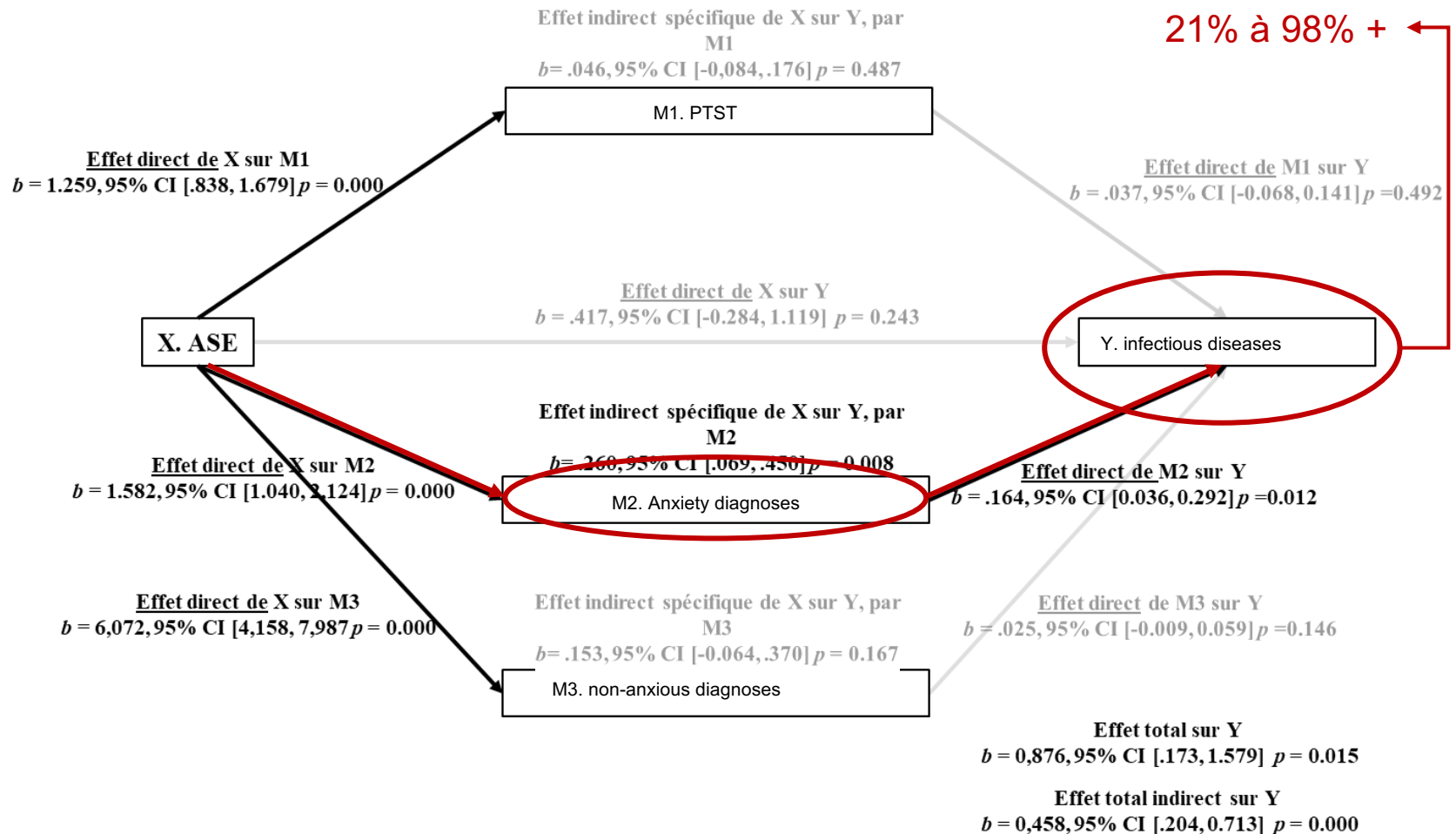
2 : 400% more hospitalisations among SA youth on average

3. Similar annual incidence for abused boys and girls after 5 years

4. Annual incidence is stable over time for all



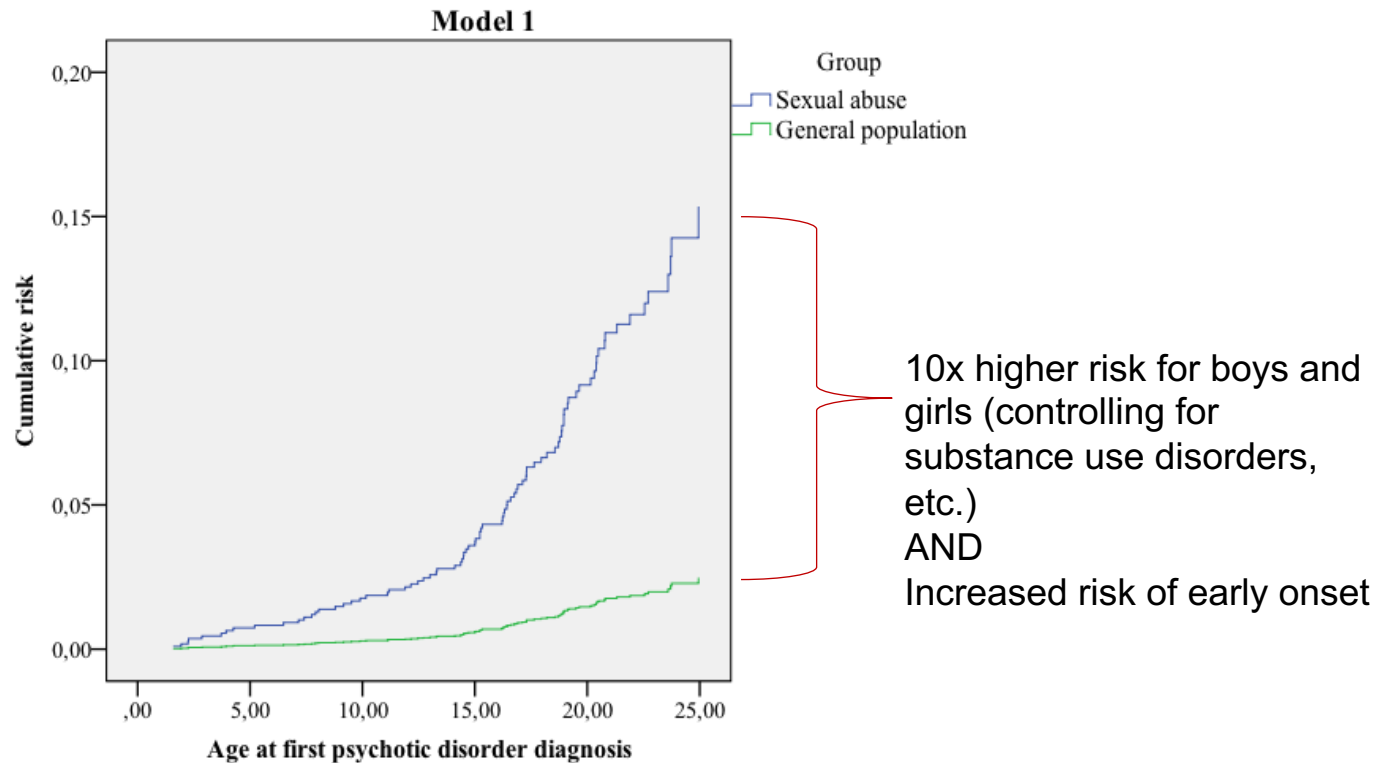
# RESULTS – SPECIFIC DISORDERS



Dargan, S., Daigneault, I., Ovetchkine, P., Jud, A., & Frappier, J. Y. (2019). Child Abuse & Neglect.  
 Maalouf, O., Dargan, S., Frappier, J—Y., et Daigneault, I., (in press). Journal of Child Sexual Abuse



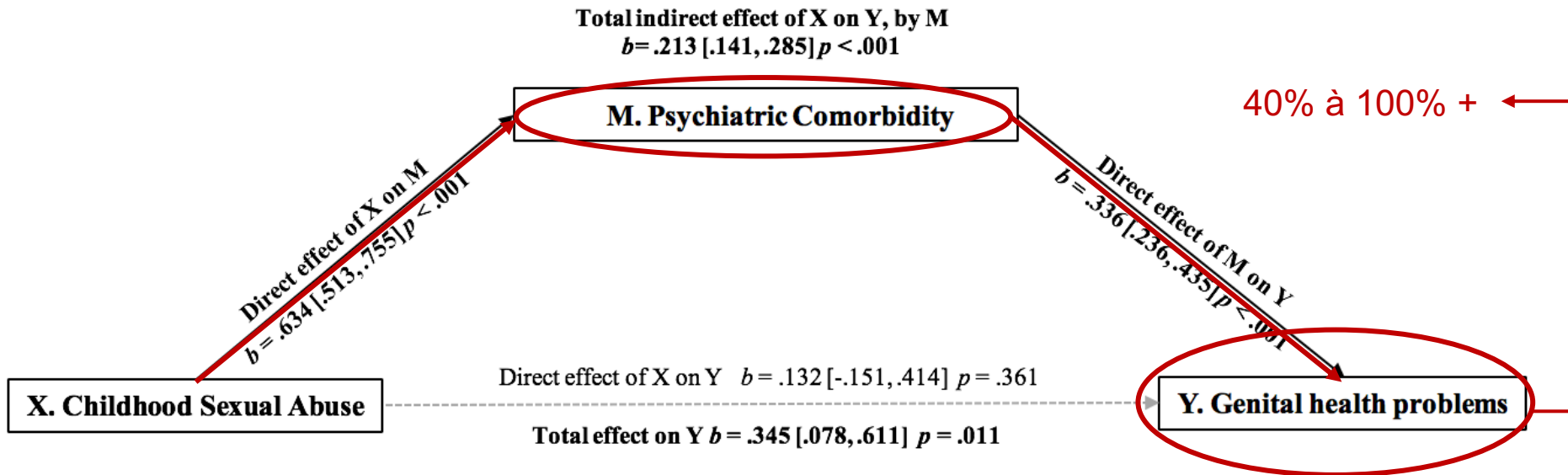
# RESULTS – SPECIFIC DISORDERS



Bourgeois, C., Lecomte, T., et Daigneault, I. (2018). Psychotic disorders in sexually abused youth: A prospective matched-cohort study. *Schizophr Res*,  
Bourgeois, C., Lecomte, T., et Daigneault, I. (soumis). Child sexual abuse and age at onset of psychotic disorders: a matched-cohort study.



# RESULTS – SPECIFIC DISORDERS



**Figure 2.** Results of mediation analysis testing the link between childhood sexual abuse and genital health problems through psychiatric comorbidity, while controlling for socio-economic status, number of years of medical data, psychiatric disorders and genital health problems that could have occurred before the first substantiated report of sexual, as well as controlling for genital health problems that could have occurred between the report date and the first psychiatric diagnosis. The  $b$  represents the unstandardized regression coefficient. 95% Confidence interval (CI) for total, direct and indirect effects were created with robust standard errors as our outcome is a count variable.



# CONCLUSIONS

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## Consequences

The physical and mental health of abused children is affected quickly after abuse is reported, which leads to a significant risk of hospitalisations and consultations for various health problems that last up to 10 years post-report.



## Gender

Boys, like girls who are sexually abused, have more consultations and hospitalizations than those from the general population  
BUT abused girls consult more for physical health and abused boys more often for mental health disorders



## Prevention

Preventing sexual abuse could help decrease the incidence of physical and mental health problems among young people, especially more serious problems requiring hospitalization



## Prevention

Document the most common disorders after sexual abuse and risk / protective factors predicting physical health problems in victims





# FUTURE PROJECTS

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## 1. Extended medical and administrative data

- Several Youth Centres in Quebec
- Several reasons for youth protection involvement
- Pan-Canadian data
- International collaborations
- Links between health and protection services received

## 2. Beyond the medico-administrative data...

- Online questionnaire
- Interviews
- To better understand resilience and trajectories



Thank you for your attention