

EVOLUTION OF MENTAL HEALTH SICKNESS ABSENCE DURING AN INTERVENTION ON PSYCHOSOCIAL WORK ENVIRONMENT

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Introduction

In previous research among nurses we have documented a significant increase in adverse conditions and psychological distress since the health care restructuring

This deterioration of work conditions was accompanied by an increase in sickness absence for mental health problems and their duration (**24 days mean increase in 6 years**)

General objective of the study

Evaluate interventions aimed at concretely reducing well documented adverse work organization factors and at preventing their health effects

Aim of the study

- Reduction of adverse psychosocial work factors
- Reduction of mental health problems and sickness absence

Study design and methods

- Quasi-experimental design
- Experimental group (EG) N = 492
- Control group (CG) N = 618

Two university affiliated acute care hospital in Québec city

Study design and methods

- Pre and post-intervention measures :
telephone interview on psychosocial work
environment and health (70% response rate)
- M0 = 2000 Pre-intervention
- M1 = 2002 12 months after intervention
- M2 = 2004 36 months after intervention

Study design and methods

- Sickness absence data from administrative files in the two hospitals
- Diagnoses classified ICD-10
- Consent form

Intervention group

Participative Intervention group :

staff nurses and orderlies, chief nurses, management (nursing and human resources), unions representatives from **three** departments in the experimental hospital (**12 members**)

Intervention group

Theoretical background : 2 recognized models, namely

- ❖ Karasek, Theorell and Jonhson's Demand-Control-Support model
 - ❖ Siegrist's Effort-Reward Imbalance
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- Identification of specific constraints
 - Recommendation of solutions

Intervention group

- December 2000 - march 2001
- Six 3-hour meetings : identification of constraints and solutions
- Report and recommendations to nursing management : august 2001
- Three 3-hour meetings : follow up of recommendations : 2001-02

Intervention : any changes affecting the targetted constraints

Synthesis Experimental hospital

Post intervention measure at M2 (36 months)

- All negative work factors except social support at work have decreased in the experimental hospital (5/9 statistical significance : Psychological and Emotional Demands, Effort/Reward Imbalance, Quality, Physical load)
- All health indicators have improved (5/8 significantly: Psychological distress, Sleeping problems, Work and Personal Burnout and Consultation for mental health)
- No deterioration between M0 and M2

Synthesis Control hospital

Post intervention measure at M2 (36 months)

- Two work factors have improved significantly :
Quality and Emotional Demands
- but one has deteriorated significantly : Social support
- Only one health problem has improved :
Sleeping problems
- All others problems have deteriorated although not significantly

Comparison of the two hospitals

Post intervention measure at M2 (36 months)

For 7/ 9 psychosocial factors measured, the mean at M2 adjusted for the mean at M0 was lower (lower constraint) in the experimental hospital than in the control hospital.

The mean at M2 adjusted for the mean at M0 was also inferior (less health problems) for 4/5 health measures

PRELEMINARY RESULTS

Certified sickness absence 5 days or more among care providers who had at least one episode of sick leave (1999-2003)

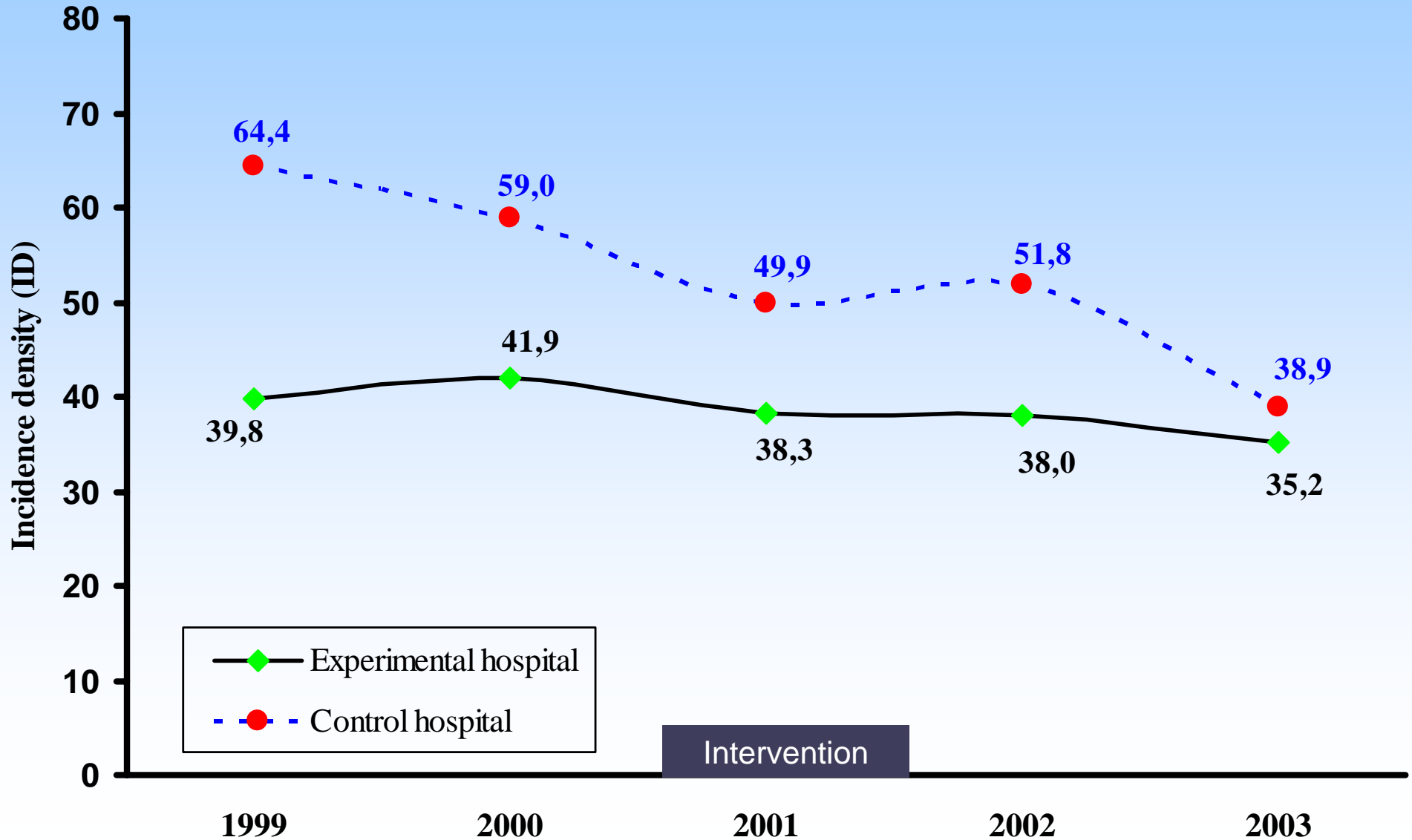
Experimental hospital N=497

Sub-categories of diagnoses	Nb episodes	% of episodes	Nb subjects at least one episode	% of subjects	Mean (days)	Median (days)
Mental health	139	23.9	95	23.0	95.4	49.0
Musculoskeletal	101	17.4	75	18.1	44.8	19.0
Others	237	40.7	162	39.1	37.2	18.9
	105	18.0	82	19.8	28.5	6.6
TOTAL	582	100.0	278/497	55.9	50.8	18.9

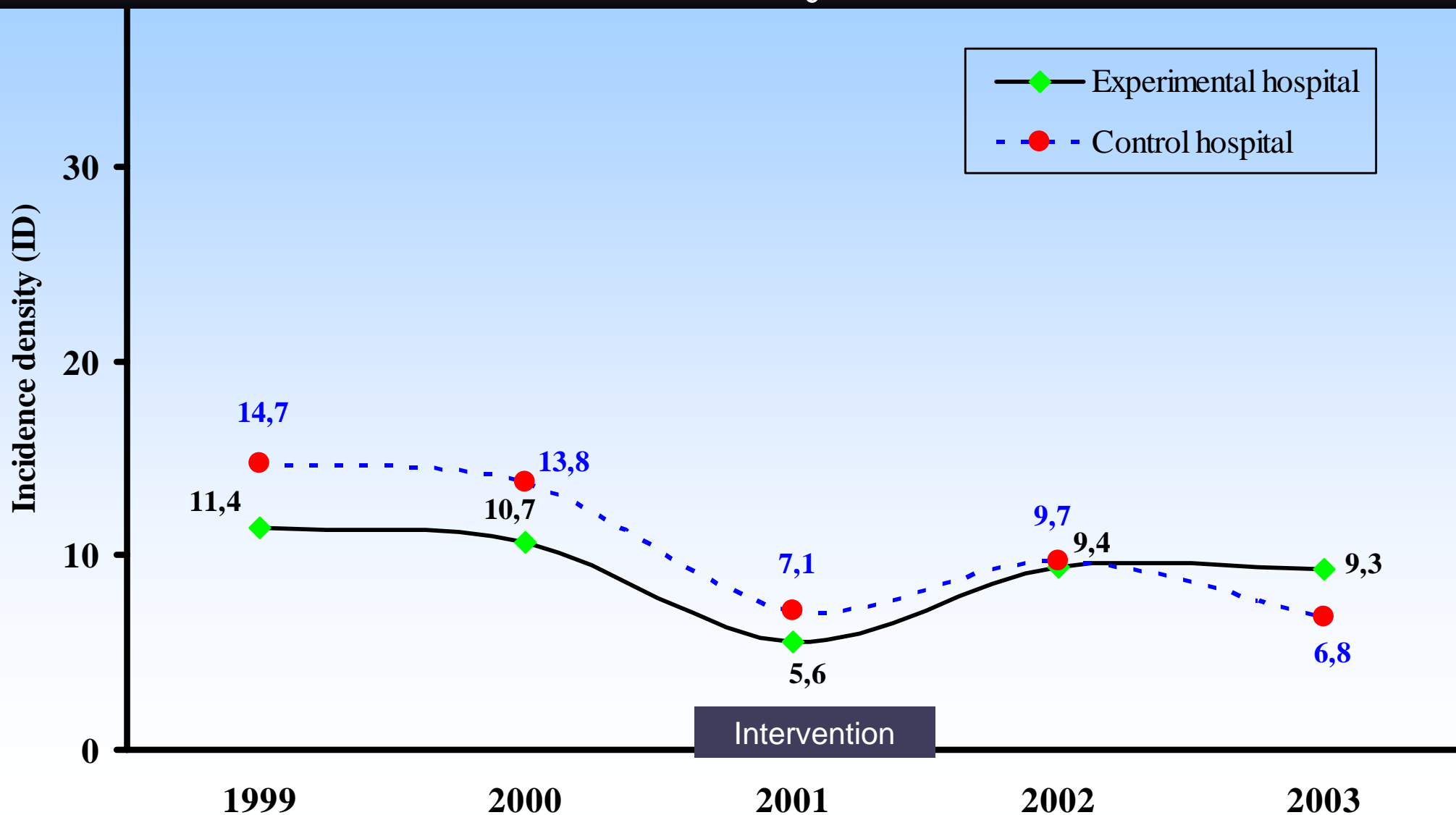
Control hospital N=602

Sub-categories of diagnoses	Nb episodes	% of episodes	Nb subjects at least one episode	% of subjects	Mean (days)	Median (days)
Mental health	179	19.7	115	19.7	88.0	53.7
Musculoskeletal	264	29.0	163	28.0	55.9	29.3
Others	377	41.4	245	42.0	38.3	18.0
	90	9.9	60	10.3	6.7	6.0
TOTAL	910	100.0	370/602	61.5	50,1	21.1

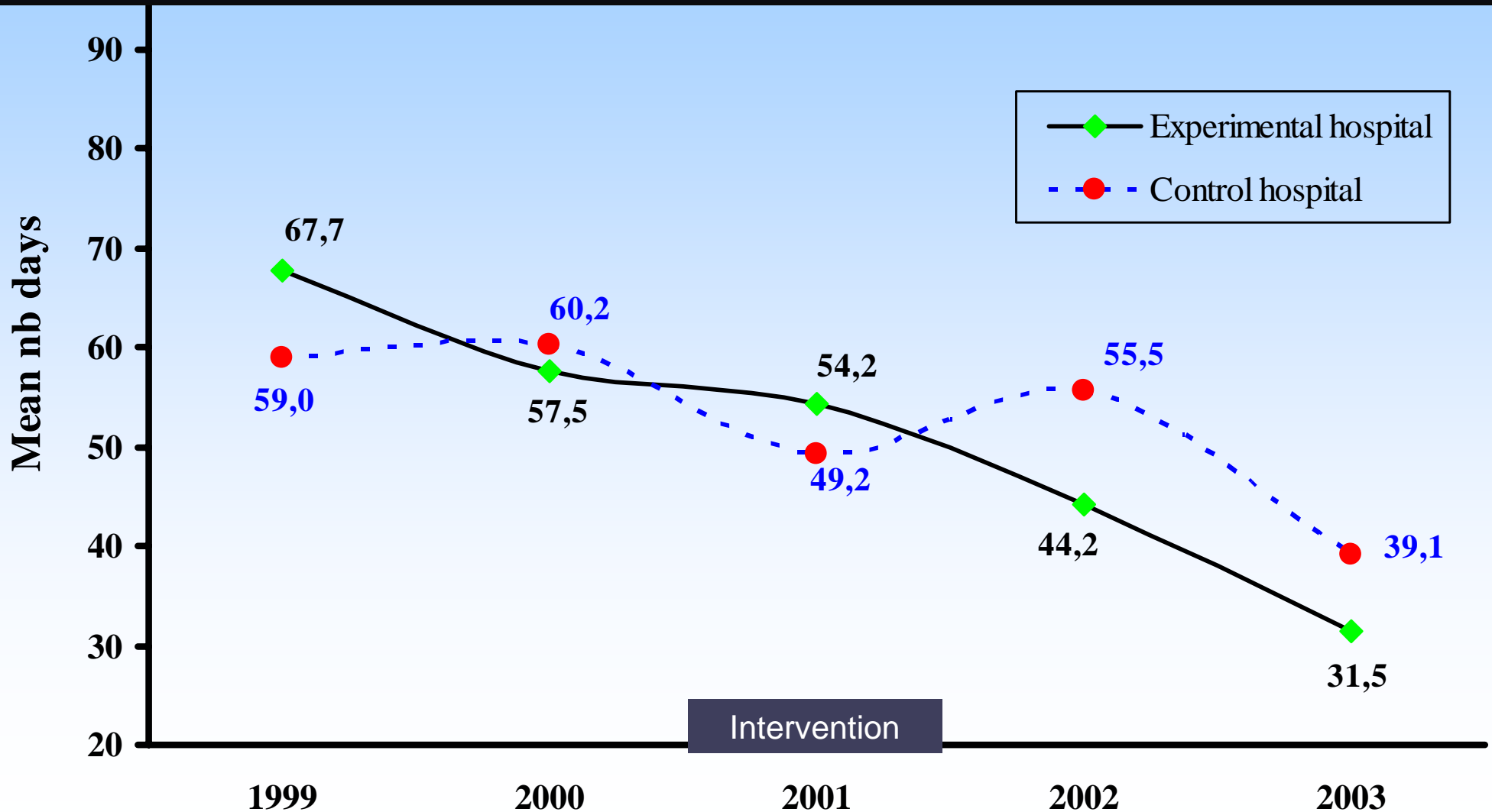
Evolution of incidence density (ID) of certified sick leaves for all diagnoses, before, during and after the intervention (1999-2003) 5 days or more



Evolution of incidence density (ID) of certified sick leaves for mental health diagnoses, before, during and after the intervention (1999-2003) 5 days or more

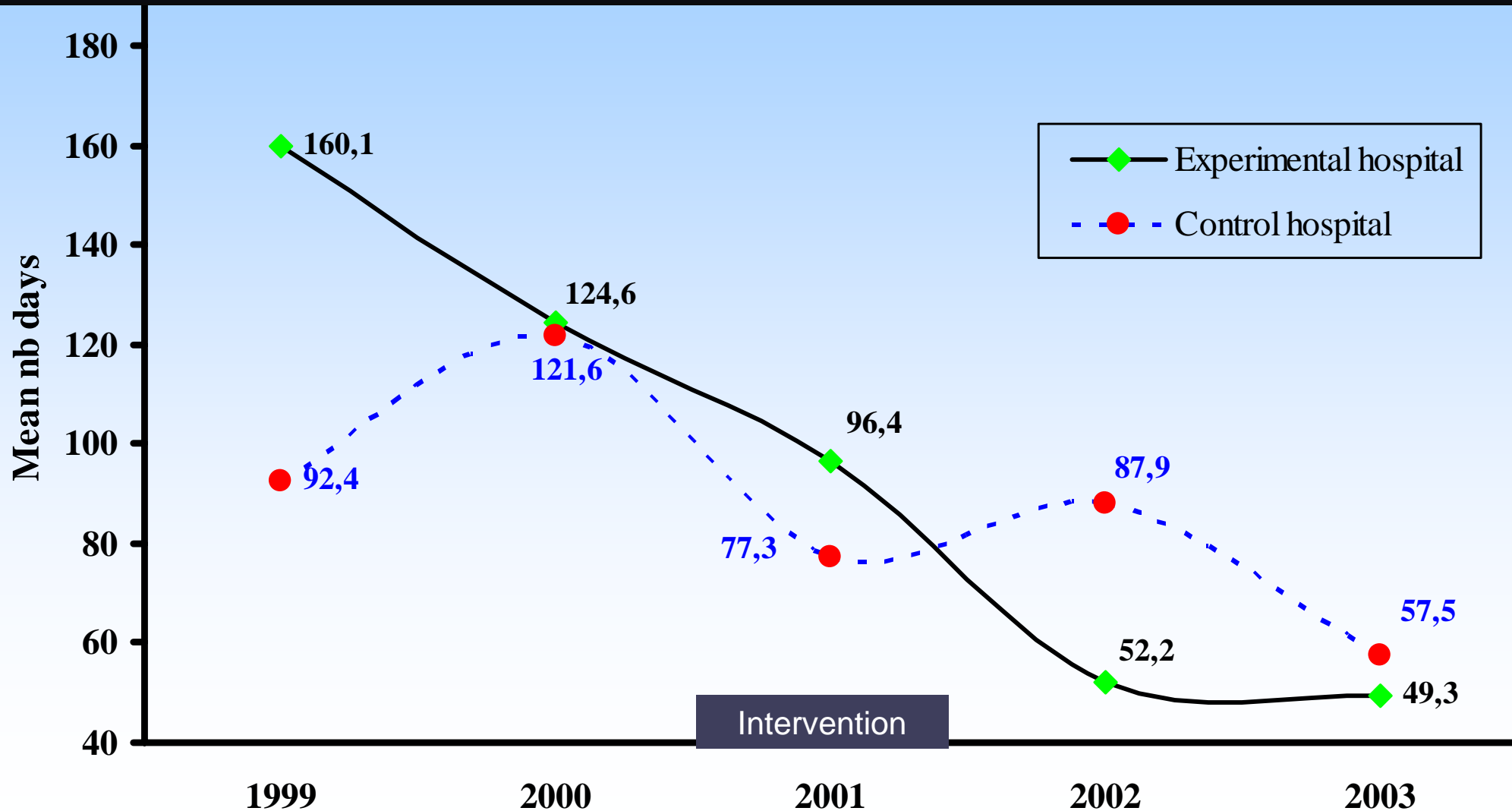


Mean length of sickness episodes by intervention periods among care providers who had at least one certified sick leave (all diagnoses) 1999-2003
Adjusted for age, sex and type of professional



Mean length of sickness episodes by intervention periods among care providers who had at least one certified sick leave (mental health diagnoses) 1999-2003

Adjusted for age, sex and type of professional



Conclusion

- Positive changes in constraints and mental health indicators were observed 36 months after the intervention (M2, spring 2004)
- The mean of certified sick leaves has dropped 36 days (all diagnoses) and 111 days (mental health)

Conclusion

These results suggest that interventions may act in preventing further increases in the prevalence of adverse psychosocial work factors and mental health problems

Pitfalls of this intervention

- No control over the intervention
- Many solutions or changes recommended were not implemented (budget cuts and restrictions)
- Intervention limited to three care units and weak diffusion (other interventions in the hospital)
- Representativeness of IG members
- Defective communication between IG members and non members (caregivers)

For more information

- Research reports are accessible in French on our website : **www.ripost.qc.ca**
- Published papers about the research
 - BOURBONNAIS R et al. OEM; 2006;63:335-342
 - BOURBONNAIS R et al. OEM 2006;63:326-334
- To join me:

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Recommendations of the intervention group

CONSTRAINTS

INTERVENTIONS

- Psychological demands : ➔ **Stabilize work teams (appointment, permanent jobs, personnel replacement by stable employees, etc.)**
- Rewards : ➔ **Improve perceptions of the important roles and skills of each member of the care team**
- Social support : ➔ **Reinforce team work (regular meetings, communication between shifts, etc.)**
- Decision latitude : ➔ **Encourage more delegation of professional acts in the care team (training, care protocols or instructions, twinning of more experienced with new workers, etc.)**