



EARLY IDENTIFICATION AND BRIEF ADVICE IN TRAFFIC CASUALTIES: AN IMPLEMENTATION RESEARCH

III INEBRIA CONFERENCE

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Cofinanced by the Catalan Traffic Service



Background

There is no doubt about the effectiveness of BI in primary care; at the ED setting the topic is more controversial. In both cases, implementation research is quite a pending subject.

There are few implementation studies and the involved factors are too often overlooked.



Implementation of simple advice in MVC casualties identified as hazardous drinkers or drunk drivers

● Aims

General

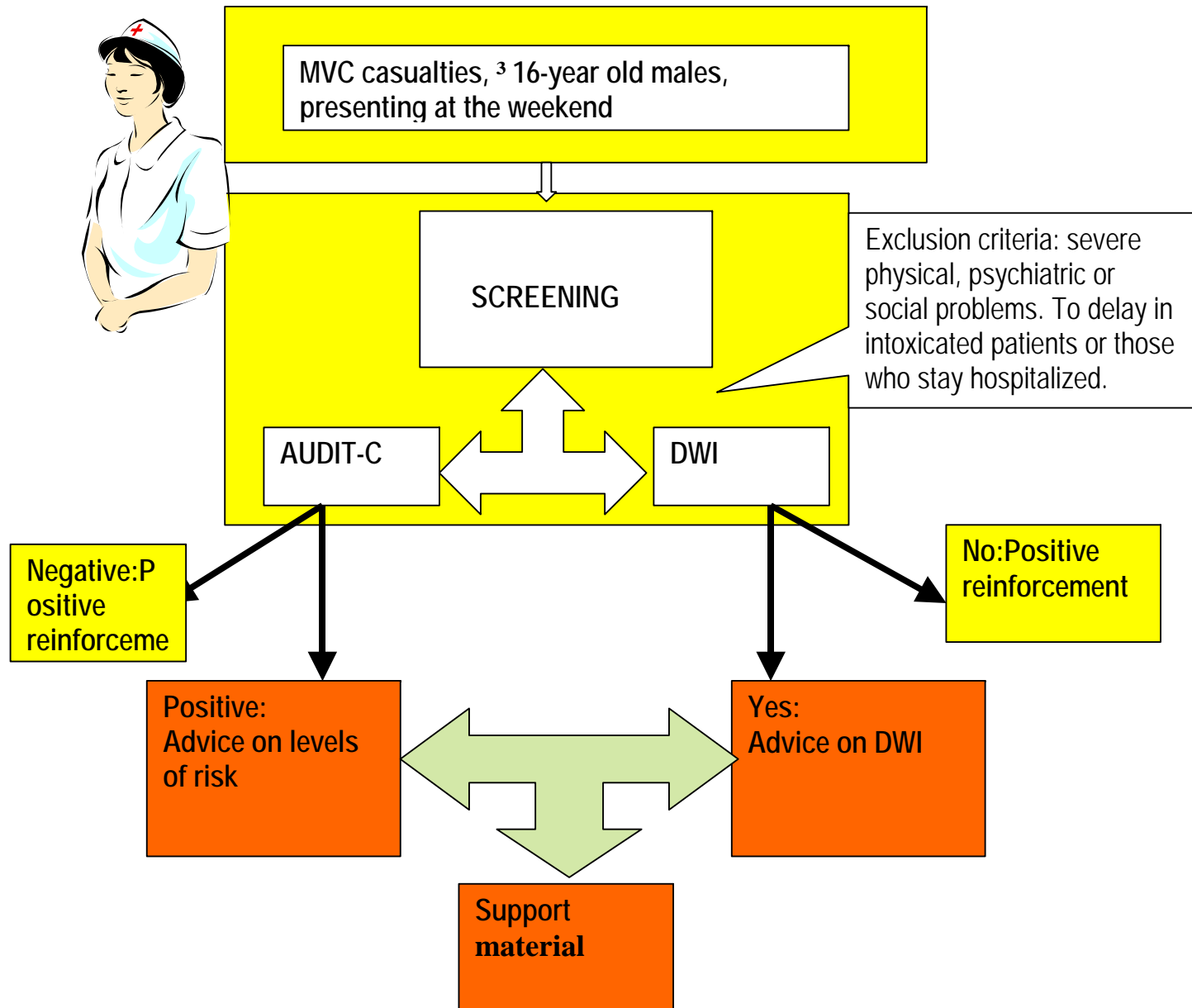
To include a SBI procedure in the routine care of trauma EDs

Specific

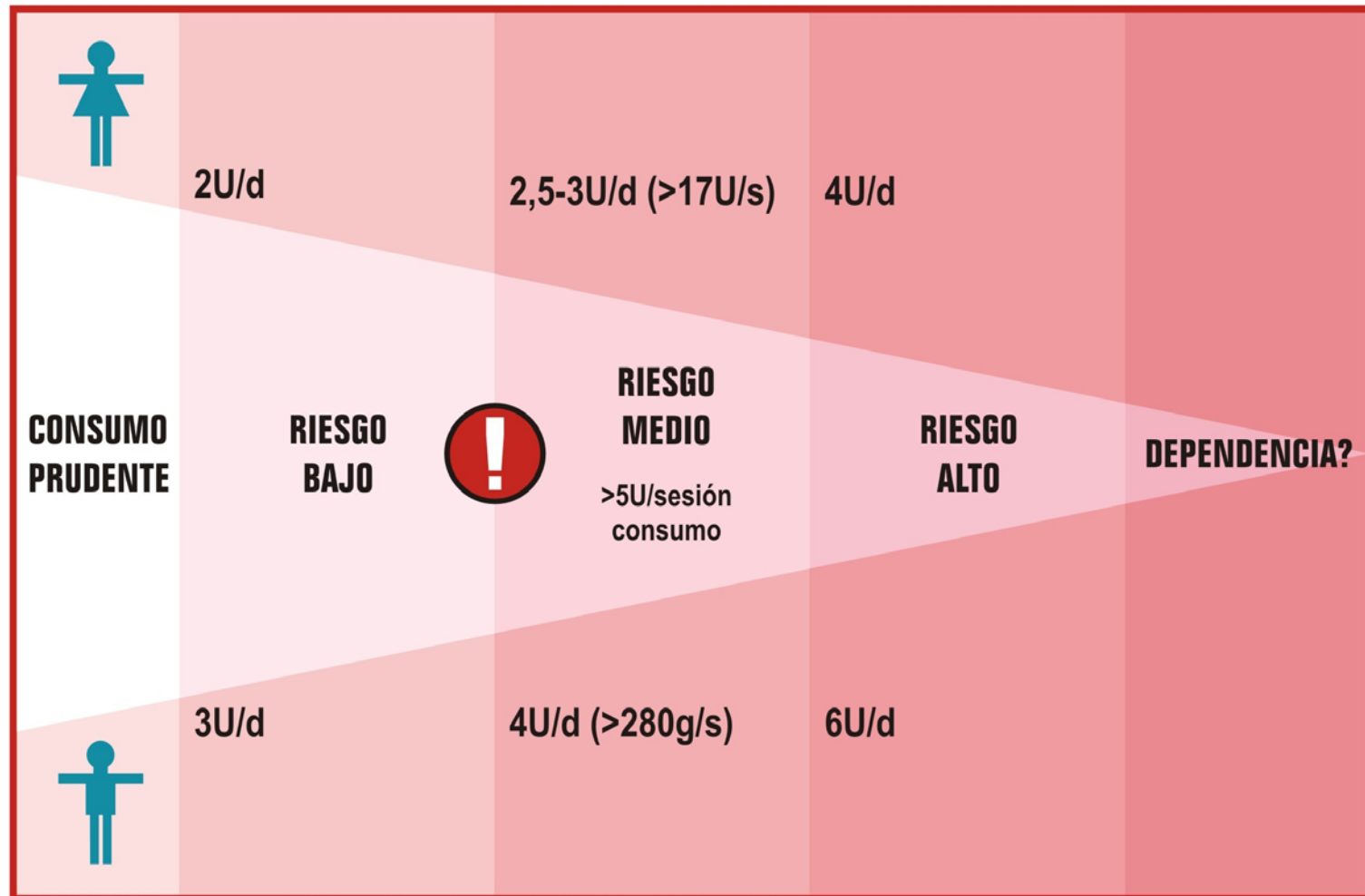
To evaluate its implementation in 2 major hospitals of Barcelona (Spain)

- ✓ Compliance with the protocol and degree of implementation
- ✓ Professionals' opinion

STUDY PROTOCOL



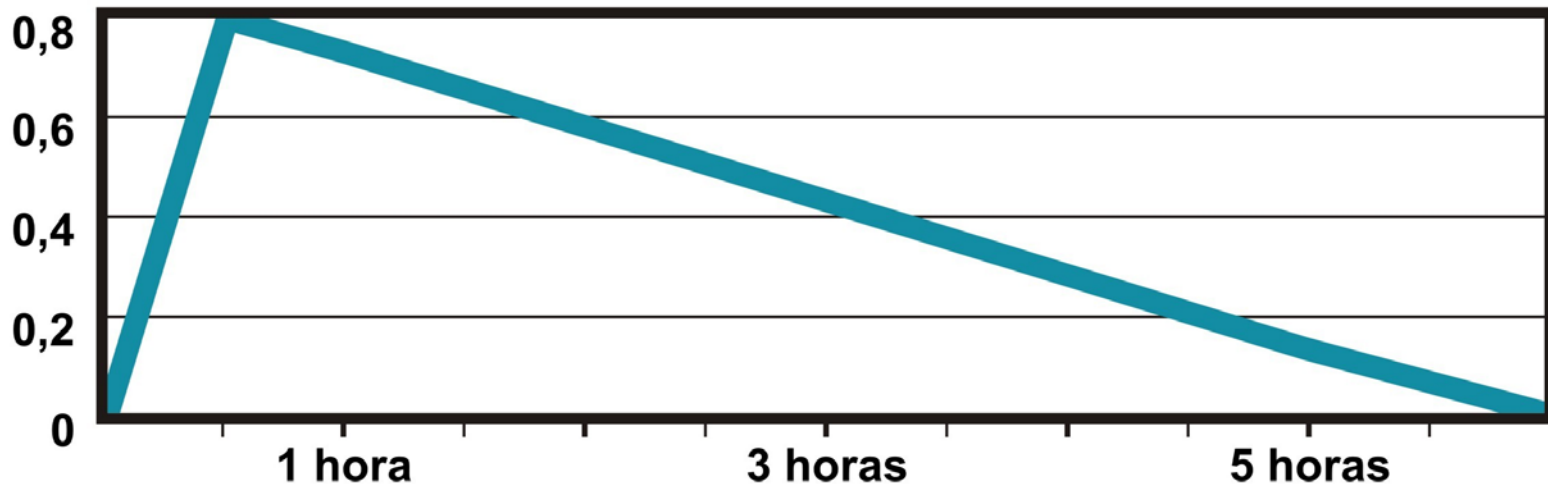
SUPPORT MATERIAL FOR THE INTERVENTION



u/d = unidades por día, u/s = unidades por semana

Rodríguez-Martos, 2002

Curva de alcoholemia



Curva de alcoholemia tras ingerir 4 vasos de vino o 2 copas de licor, un varón de unos 70 k, en ayunas
 Se necesitan 5-6 horas para eliminar completamente los 0,8 g/ de alcoholemia alcanzados.

EFFECTOS DE LA ALCOHOLEMIA

0,50 Zona de Alarma: alteración reflejos, aumento tiempo de reacción (aumenta 10% distancia frenado), problemas acomodación luz, visión en tubo, somnolencia, euforia, conducción agresiva.

Riesgo de accidente de tráfico x 3



SUPPORT MATERIAL FOR THE INTERVENTION

PRESERVA LA TEVA SALUT

Condueixis o no, revisa el teu consum habitual d'alcohol, diari i setmanal, tenint en compte que

1 unitat de beguda equival a 10g d'alcohol i és el que contenen

1 got de vi, o 1 cervesa, o 1/2 copa de licor.

Progressió del risc, segons el consum habitual d'alcohol

CONSUMI PRUDENT	2 u/d	2,5-3 u/d (>17 u/s)	4 u/d	DEPENDÈNCIA?
	RISC BAIX	RISC MITJÀ	RISC ALT	
	3 u/d	4 u/d (>28 u/s)	6 u/d	

u/d = unitats per dia, u/s = unitats per setmana

Si arribes al llindar de risc mitjà, ha arribat l'hora de frenar. Bevent regularment aquestes quantitats t'hi jugues la salut.

SI NECESSITES AJUDA, CONSULTA EL TEU METGE O TELEFONA AL

Servei de Prevenció i Atenció a les Dependències

93 238 45 60

Més informació: www.elalcoholtytu.org

D'acord amb el Reglament General de Circulació (Real Decreto 1428/2003, per a l'aplicació de la Ley 19/2001), els conductors de vehicles, ciclistes inclosos, no podran circular amb una taxa d'alcohol a la sang superior a 0,50 g/l (en aire expirat, de 0,25 mg/l).

Els conductors de qualsevol vehicle no podran superar la taxa d'alcohol a la sang de 0,30 g/l (en aire expirat, 0,15 mg/l) durant els 2 anys següents a l'obtenció del permís de conduir o la llicència.

Tampoc podran superar aquesta taxa els conductors del servei públic, transport escolar, de materials perillosos o càrregues pesades i conductors de serveis d'urgència o transports especials.

I recorda que és una infracció molt greu conduir amb taxes superiors a les esmentades i pot comportar la suspensió del permís o llicència per conduir fins a tres mesos, així com la pèrdua de fins 6 punts, segons la nova normativa del carnet per punts (Ley 17/2005), que entrarà en vigor el juliol del 2006.

I que en determinades circumstàncies, la conducció sota els efectes de l'alcohol pot constituir un delictes contra la seguretat del trànsit (article 370 del Còdigo Penal). En aquest cas, pot comportar una suspensió del permís o llicència d'1 any i 1 dia fins 4 anys, en funció de la gravetat dels fets..

Ajuntament  de Barcelona

Pla d'Acció sobre Drogues

C S B Consorci Sanitari de Barcelona

 Agència de Salut Pública

 servei català de **Trànsit**

L'ALCOHOL I TU



ACABES DE TENIR UN ACCIDENT



IMPLEMENTATION STAGES

● I - Exploration and adoption

- ✓ The programme was in line with the municipal action plan on drugs of BCN
- ✓ 4 hospitals were contacted and 2 joined the programme
- ✓ Protocol was agreed.

● II - Installation of the programme

Staff selection and staff training

- ✓ Project coordinator was the chief nurse at each hospital
- ✓ 8 nurses (4 x 2 hospitals) were selected as trainers by the hospitals
- ✓ All the ED nursing staff should participate in delivering the intervention
- ✓ Researcher trained trainers (8 hours), including role-playing
- ✓ 8 trainers trained staff (79 nurses) in two hospitals (2-4 hours)



IMPLEMENTATION STAGES

● **III - Initial implementation**

- ✓ Staff deliver SBI to eligible patients (April 28th to October 29th)
- ✓ Coaching of the staff
(regular supervision of the procedure, assessment and support carried out in regular interviews with coordinator and participating staff)

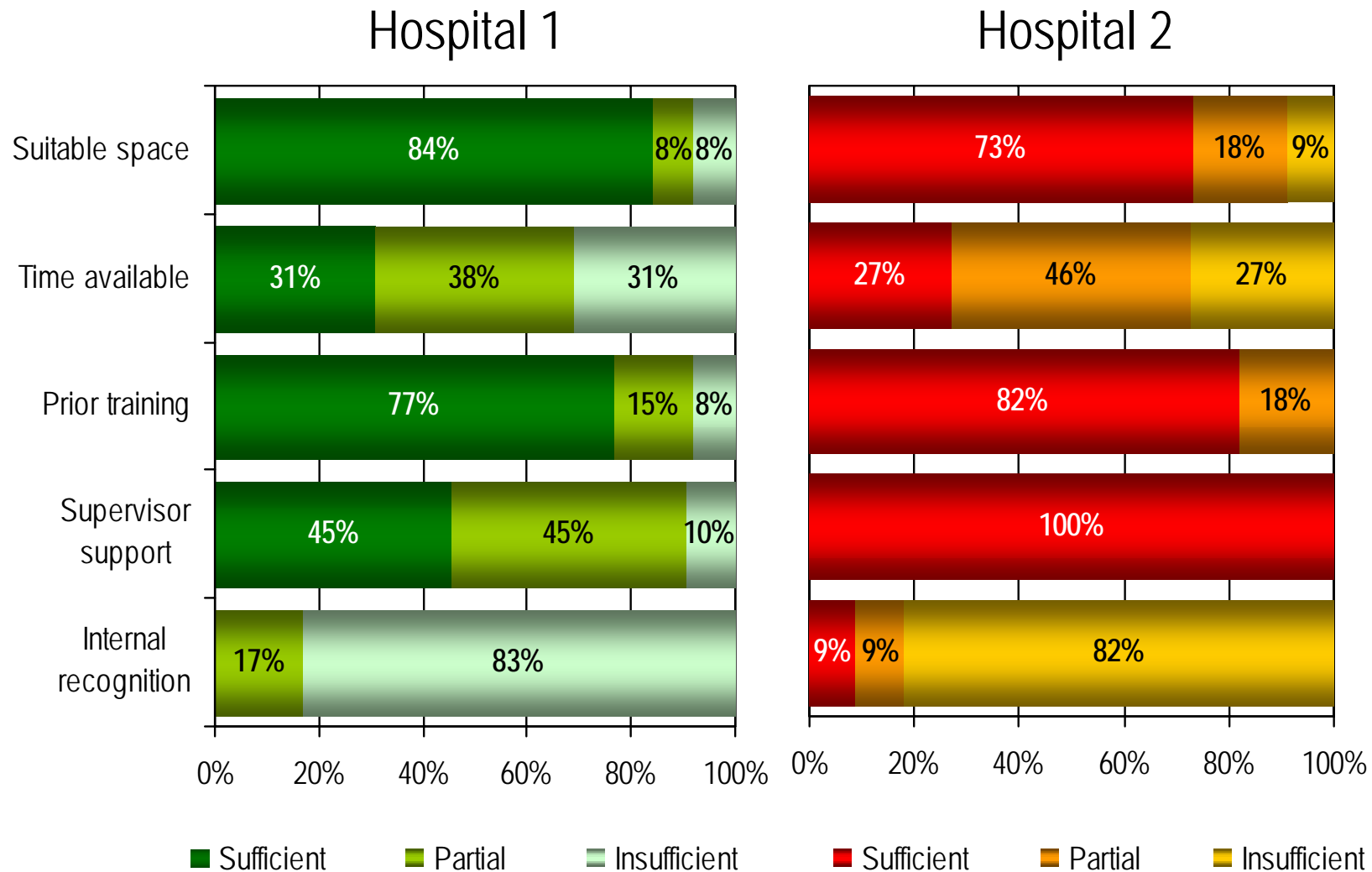
● **IV - Evaluation of the initial implementation**

- ✓ Evaluation of the programme (context and implementation degree)
- ✓ Fidelity to the model (knowledge and compliance)
- ✓ Opinion survey to the participating staff



EVALUATION OF THE PROGRAMME

EVALUATION OF THE CONTEXT BY PARTICIPATING NURSES (N= 24)





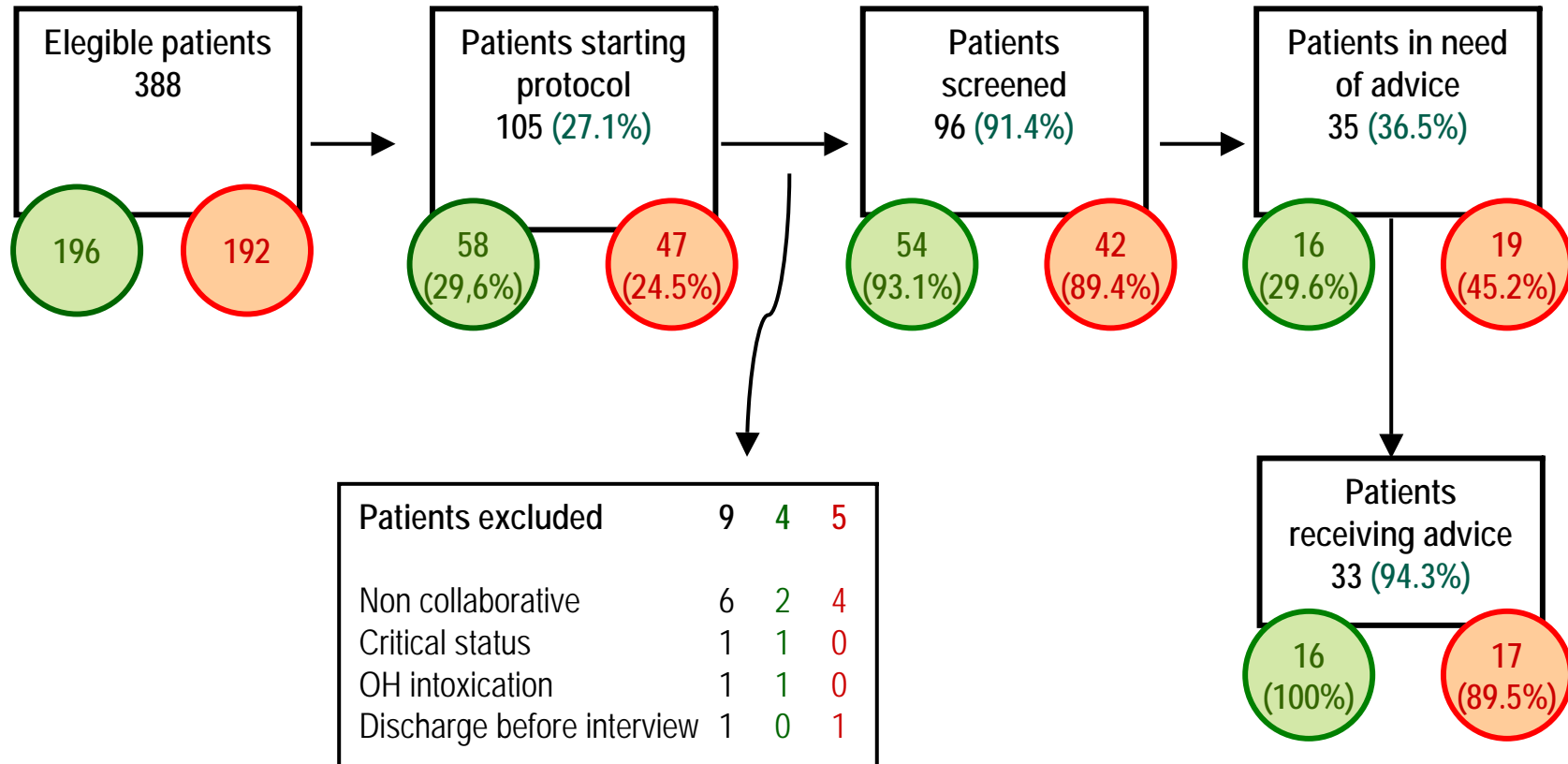
EVALUATION OF THE PROGRAMME

❖ EVALUATION OF THE CONTEXT BY THE RESEARCHER

- ✓ 8 trainers trained 79 staff; replacement staff are seldom trained
- ✓ We don't know how many nurses are actually participating
- ✓ The 2 participating hospitals had trouble in delivering the intervention (lack of time, change of coordinator, holidays, repair works, etc.)
- ✓ Internal organization was well designed, but not always accomplished (communication often failed); most of the medical staff aren't aware of the procedure

EVALUATION OF THE PROGRAMME

IMPLEMENTATION DEGREE*



Hospital 1
Hospital 2

* Provisional results (up to October 8th 2006)

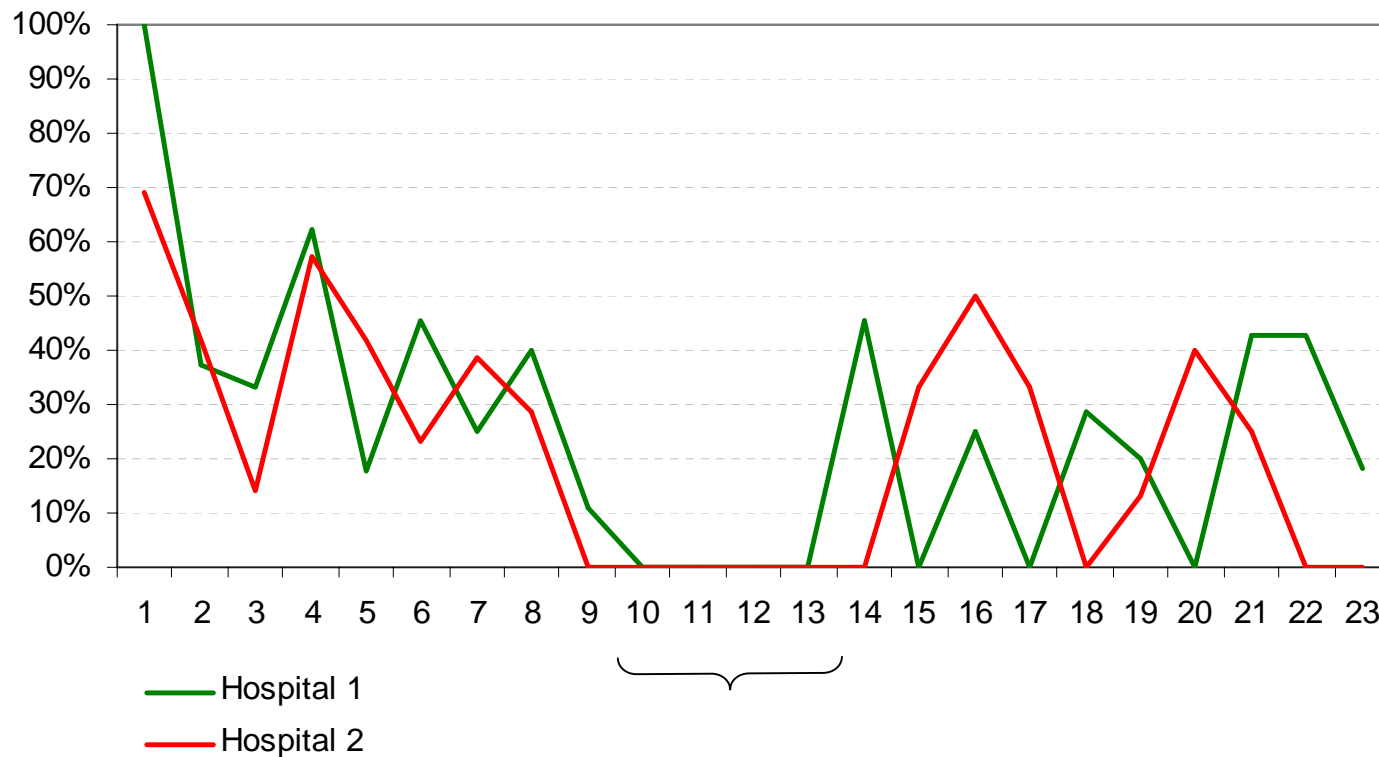


EVALUATION OF THE PROGRAMME

IMPLEMENTATION DEGREE*

Interviewed patients among eligible population (N= 388)

Percentage per weekend (28-IV to 8-X)



July 2006

• Provisional results
(up to October 8th 2006)

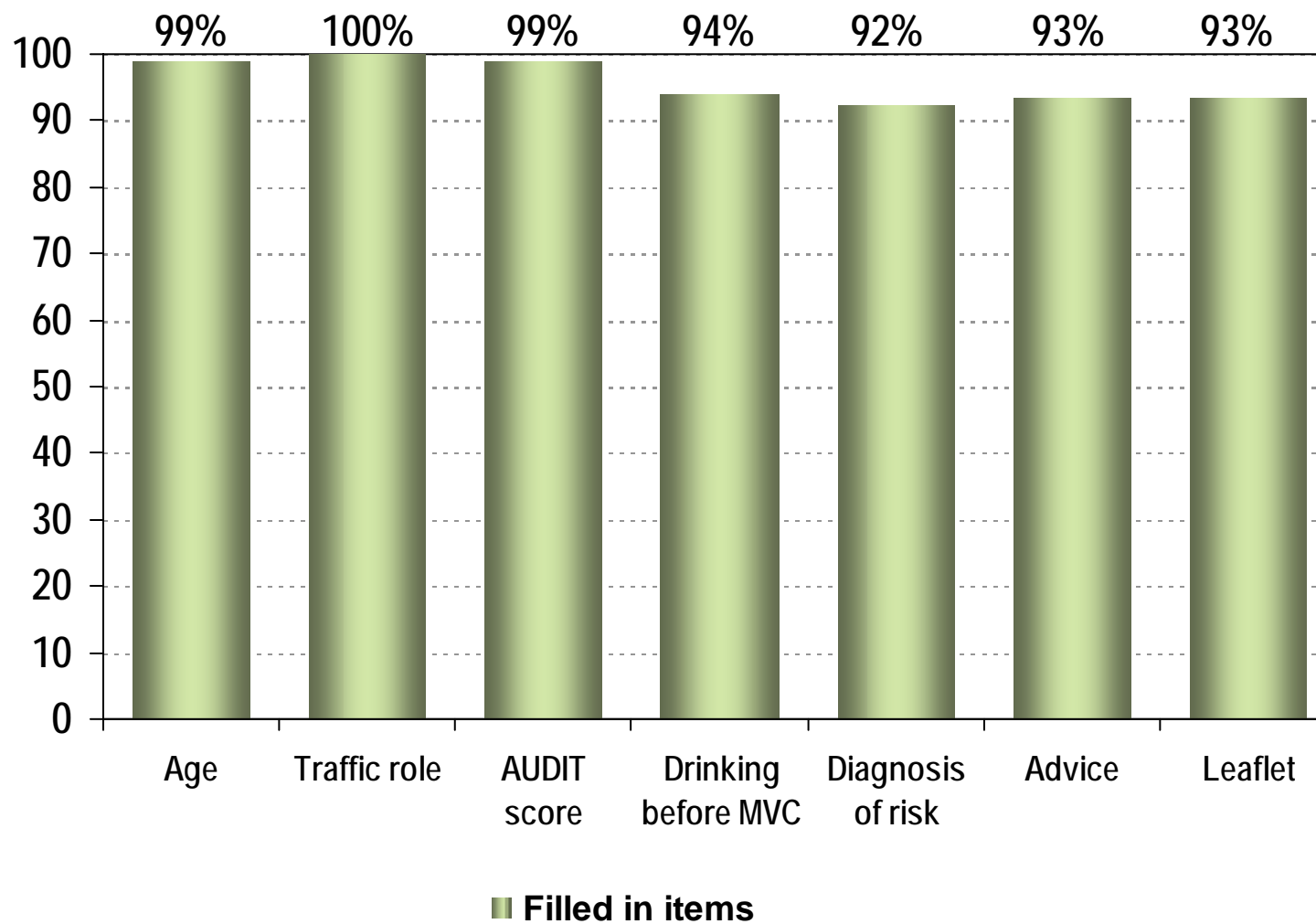


FIDELITY TO THE PROGRAMME BY THE STAFF (evaluation by the researcher)

<p>Knowledge of the programme (measured by 5 questions, each scored from 0 to 2)</p> <p>Hospital 1 Hospital 2</p>	<p>Mean score</p> <p>8.8 9.2</p>
<p>Compliance with the protocol (self-referred) (measured by 5 questions, each scored from 0 to 2)</p> <p>Hospital 1 Hospital 2</p>	<p>Mean score</p> <p>9.1 9.6</p>



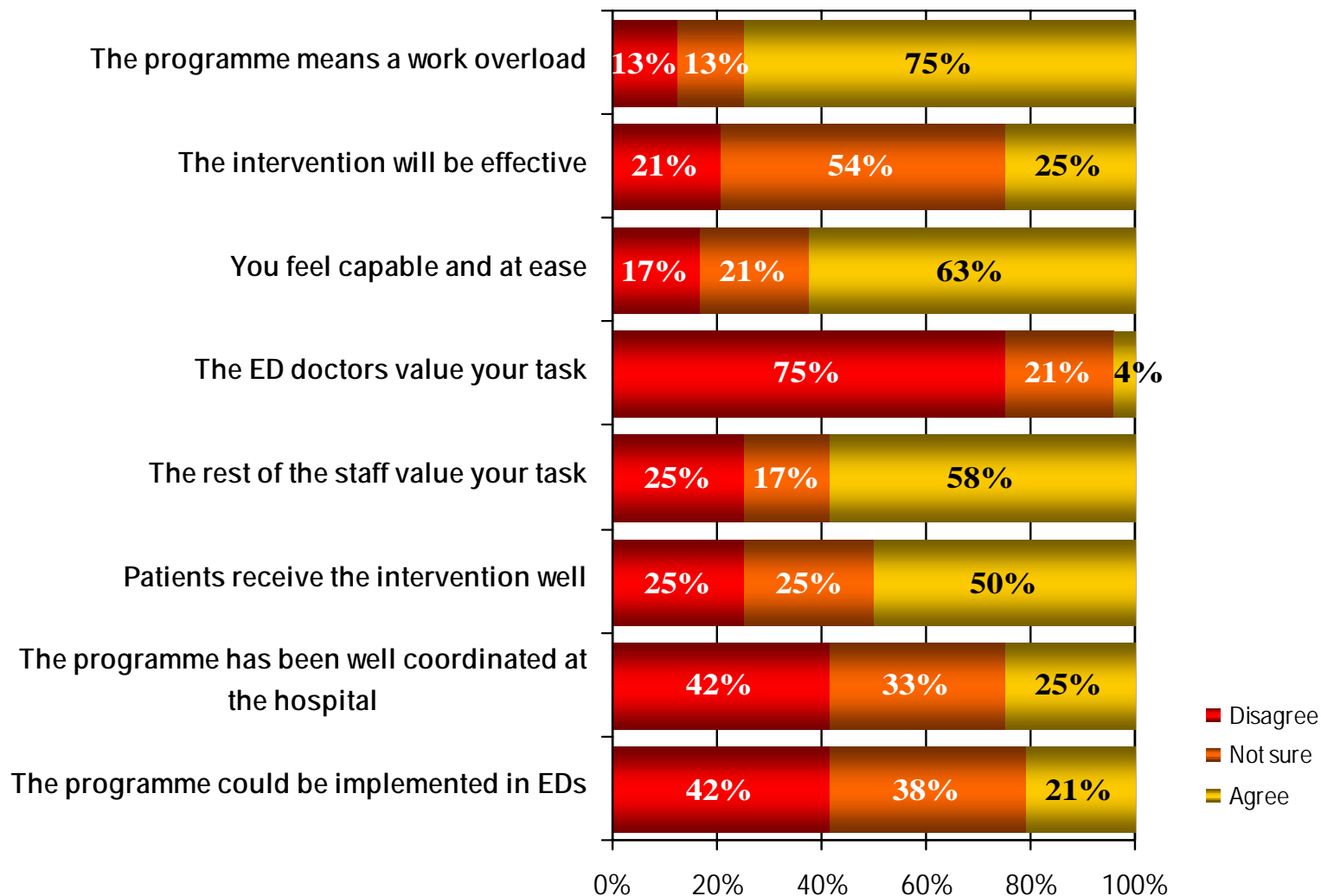
COMPLIANCE WITH THE DATA FORM



No differences between hospitals



OVERALL OPINION SURVEY TO THE NURSING STAFF (N=24)



No differences between hospitals



PATIENTS' PROFILE (N=96)

Mean age: 29.5 years

Traffic role: 76% drivers

AUDIT-C positive: 30.3% (mean score in the global sample: 3.2)
(mean score among positive patients: 6.5)

DWI: 23.3% of the sample

Mean number of drinks: 3.5

Mean age: 30.8

AUDIT-C positive + DWI: 11.5%

There is a positive association ($p < 0.001$) between
AUDIT-C and DWI



Distribution of variables depending on consumption before MVC or before driving

	No OH before MVC (N=67)	OH before MVC (N=28)	P value	OR (CI 95%)
Mean age	29.5	29.8	0.915	
Position in traffic				
Driver	56 (83.6%)	17 (60.9%)		0.30 (0.11-0.82)
Passenger	7 (10.4%)	11 (39.3%)		5.55 (1.86-16.50)
Pedestrian	4 (6.0%)	0		-

	No OH before driving (N=56)	OH before driving (N=17)	P value	OR (CI 95%)
Mean age	30.3	32.3	0.588	
Mean score in AUDIT-C	2.3	5.5	0.000	
AUDIT-C positive				
N	10 (17.9%)	11 (64.7%)		8.43 (2.50-28.2)
Mean score	5.5	7.3	0.024	



DISCUSSION (I)

- The procedure is **not easy** to carry out.
- Two of the 4 contacted hospitals dropped out before the start of the study as it was considered difficult and not priority.
- The training trainers course, common to all trainers, was well valued.
- **Circumstances vary by hospital.**

Staff training and coordination were uneven.

- The implementation dropped abruptly in July (lack of leadership - holiday staff).
- Anyway, **27.1%** of eligible patients were identified and **24.7%** explored. **36.5%** were in need of advice **94.3%** of them received it.



DISCUSSION (II)

- The nursing staff concerned reckon that the available **time and staff** are **insufficient** for applying the procedure.
- Most of them feel **capable** to perform it, although half of them are **sceptical** about its usefulness.
- 50% of nurses believe that patients **welcome** the intervention.
- *Enough **resources** should be allocated to assume preventive tasks at the ED.*
- *Pedagogy about BI should be reinforced (**motivate the professionals and their context!!!**)*
- *Broadening the target population (all MCV, daily) would make the implementation easier, nurses say.*

CONCLUSION



We can't make giant steps, but a continuing and general effort is needed in order to educate and advise people who are in need of it and ready to listen.