

***Effectiveness of GP intervention on risk drinking clients  
The Florence Early Identification and Brief Intervention Project  
A re-analysis of data***

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## Introduction

- The effectiveness of EIBI has been shown in most studies that have been carried out in English-speaking countries (Anderson et al., 2003; Kaner et al., 2007), while little research does exist in Italy about this issue.
- A study was implemented in Florence, Italy, between 2005 and 2007, involving 25 GPs operating in two comparable areas in the surrounding of Florence (see Allamani et al., 2011). The study results have been now re-examined by means of appropriate statistical methods.



## *The Florence Early Identification and Brief Intervention Project*

The 25 GPs (who had received an alcohol training) using a simple set of questions about drinking patterns:

- were able to enrolled 2,869 clients;
- identified 308 (10.73%) Risky Drinkers (RD);
- raised the issue of drinking risks with their RD clients, and had a follow up within the following months.

Baseline risky drinkers had a 55.30 grams average intake per day (60.15 g for males, 41.63 g for females), which decreased to 37.61 grams at the first follow-up (41.71 g for males, 26.06 g for females).

## *The Methods*

Regression to the mean (RTM), uni- and multi-variate approaches were used in order to overcome possible statistical flaws.

RTM takes into account the phenomenon that if a variable is measured more than once, its greater values will tend to be closer to the average on its second measurement.

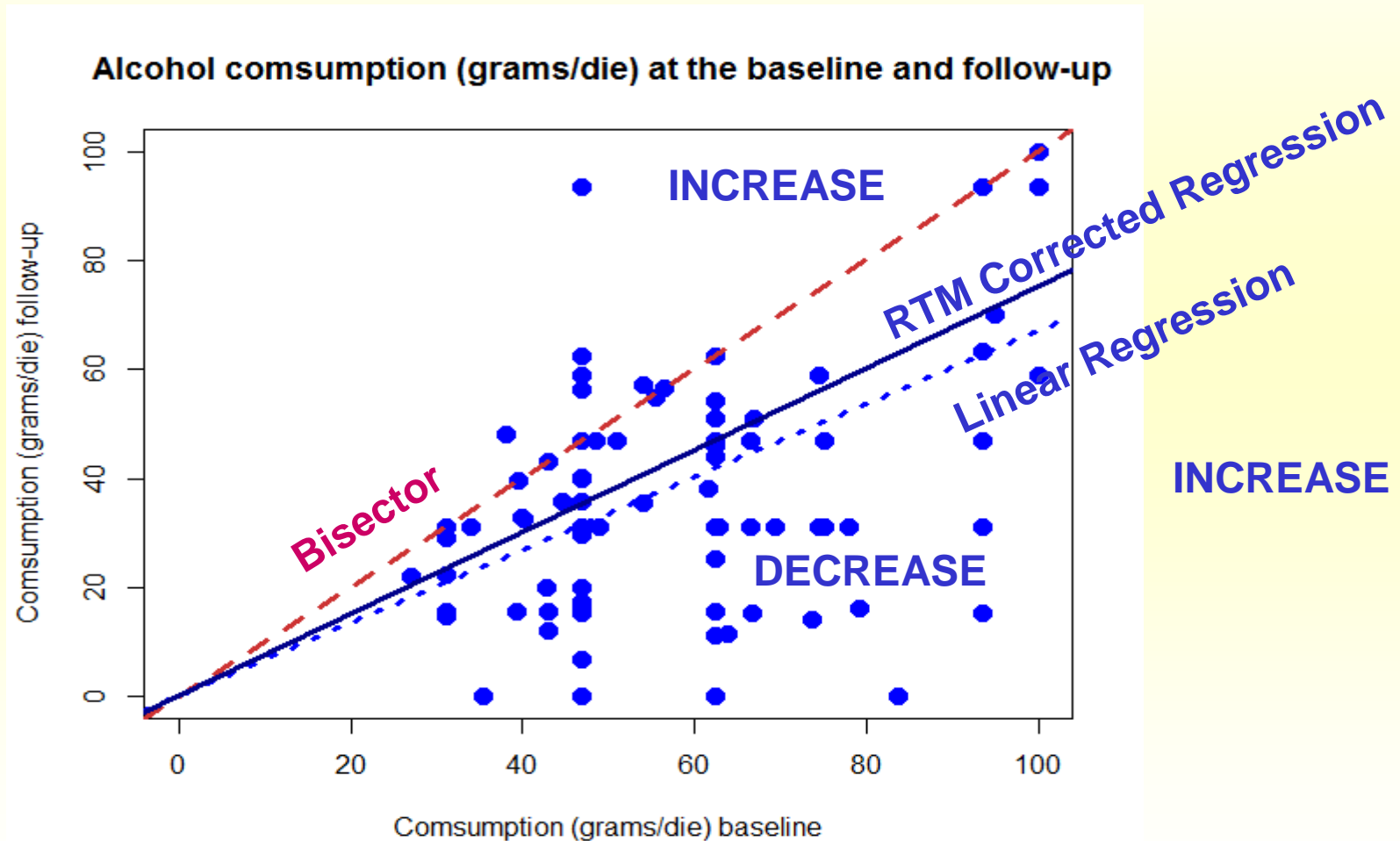
Multivariate approach took into account age, gender, GP's identification skills and biological harm

*GPs' clients showing up (N=182) and not showing up (N=126)  
according to Alcohol consumed, Age, Gender and Municipality*

	Show up at F-U (N=182, 59.1%)	Do not show up at F-U (N=126, 40.9%)	p-value
Consumption (gms/day)	59.4 ± 1.73	55.3 ± 1.78	0.109
Age (years)	55.6 ± 1.15	60.3 ± 1.02	0.003***
Male	127 (69.8%)	93 (73.8%)	0.521
Female	55 (30.2%)	33 (26.2%)	
Scandicci	62 (34.1%)	35 (27.8%)	0.297
North Chianti	120 (65.9%)	91 (72.2%)	

Comparing clients showing up and not showing up at first follow up, no significant difference appears, but for age

## Alcohol consumption changes among risky drinkers between enrolment and follow-up before and after correction for Regression Towards the Mean (RTM)

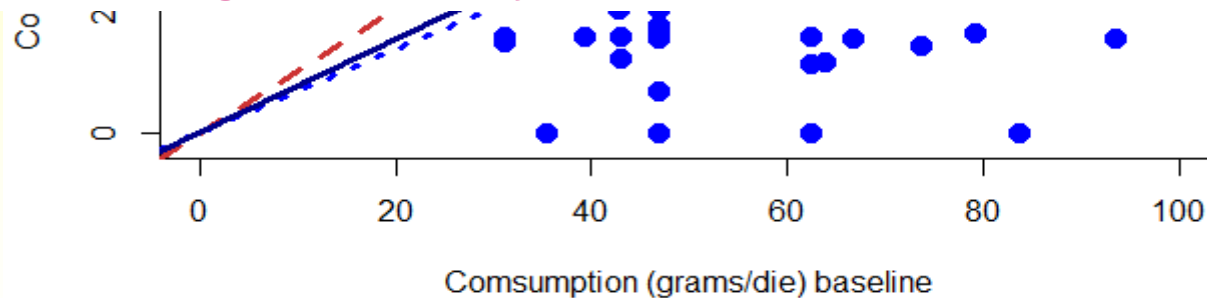


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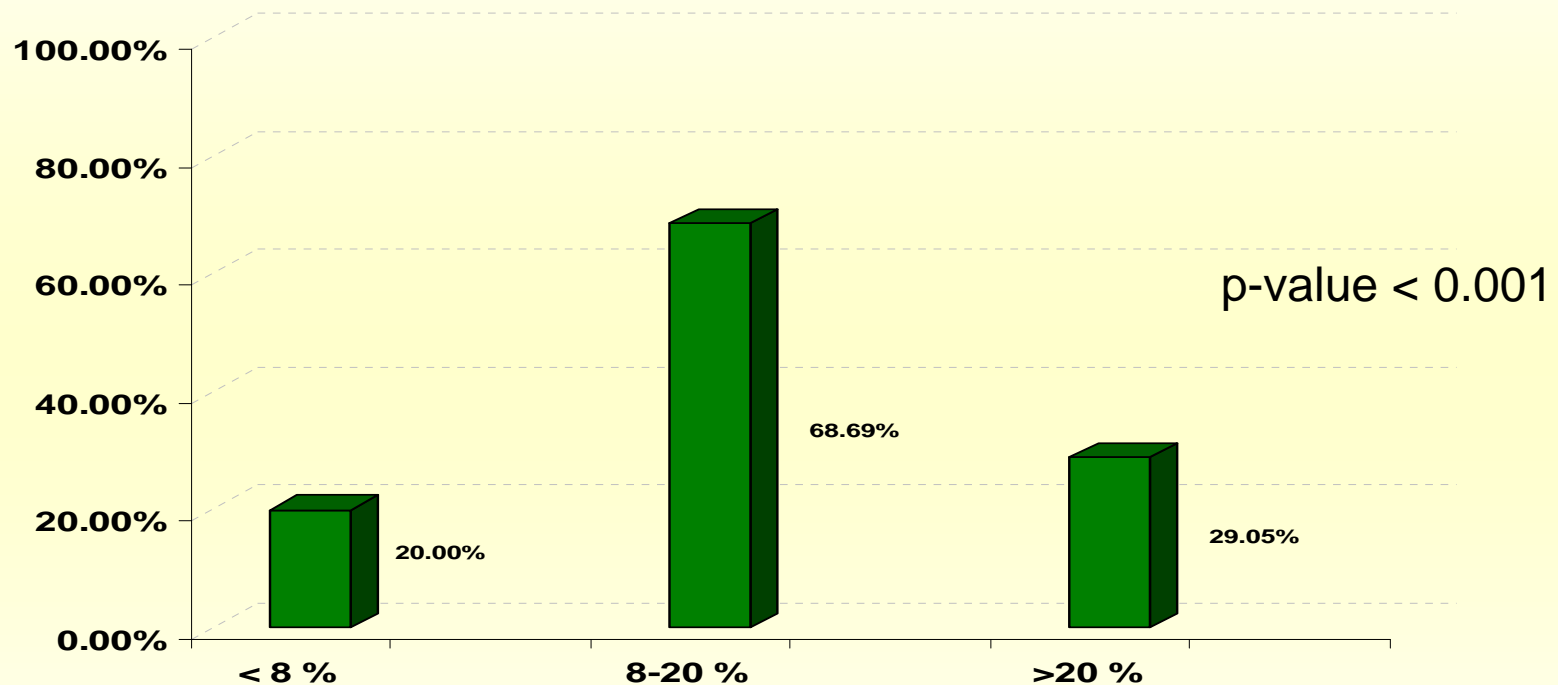
Alcohol consumption (grams/die) at the baseline and follow-up



- average consumption gms/day at the baseline: 23.38M, 8.18g F;
- reduction between enrolment and follow-up 18.44g M, 15.57g F;
- Applying the regression coefficient of the two series of measurements (0.69M and 0.63F) shows the extent of RTM 6.77g M, and 6.78g F;
- therefore the reduction of the correct consumption in grams between enrollment and the first follow-up is slightly transformed respectively in 11.67 and 8.80 grams per day.



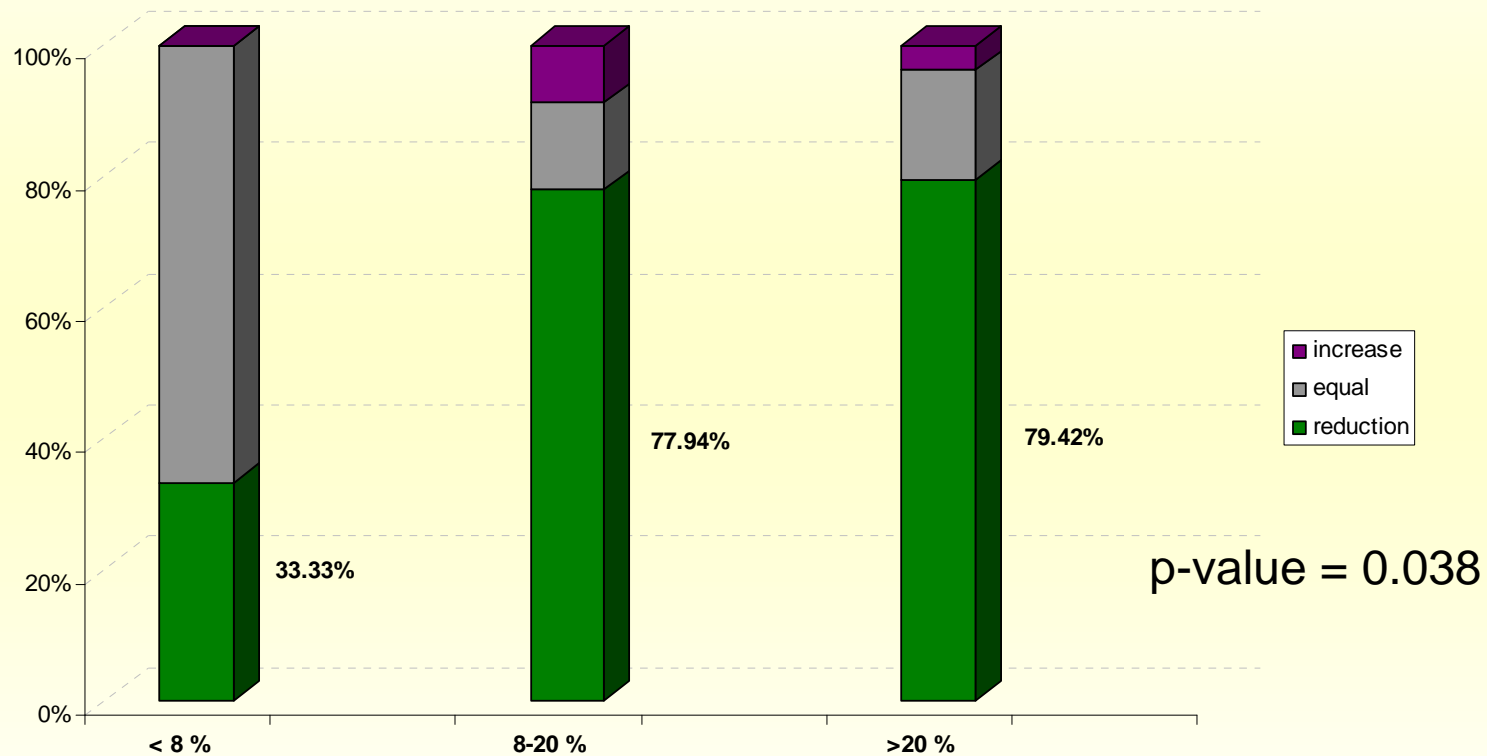
## GPs skills at identifying RD and Client's showing up at Follow Up (N=128)



**GPs who were able to identify between 8% and 20% of their patients as risky drinkers had a statistically significant higher number of patients showing up at follow-up (68.69%) compared to those who identify a lower (<8%) or higher rate of clients (> 20 %) (p <0.001).**



## GPs skills at identifying RD and Client's Alcohol consumption changes (N=128) at follow-up



**Clients of GPs who were able to identify more than 8% of their patients as risky drinkers, showed a statistically significant decrease in alcohol consumption.**

## Gender and Client's Alcohol consumption changes (N=128) at follow-up

Gender	Patients		Percentage of patients showing a consumption reduction	Percentage variation in consumption (grams/die)
	RD/Enrolled	F-up/RD		
Female	5.59% (88/1573)	37.50% (33/88)	75.76%	-37.15 %
Male	16.98% (220/1296)	42.27% (93/220)	76.34%	-28.29 %
Total	10.74% (308/2869)	40.91% (126/308)	76.19%	-30.61 %
p-value	< 0.0001	0.5213	1.0000	0.2095

**Women compared to men, appeared to be more capable of change, despite even if not at a statistically significant level ( p=0.20)**

## Age and Client's Alcohol consumption changes (N=128) at follow-up

Age (years)	Patients		Percentage of patients showing a consumption	Percentage variation in consumption (grams/die)
	RD/Enrolled	Fup/RD		
< 40	6.76 (39/577)	33.33 (13/39)	92.31%	-44.18%
40-49	10.54 (45/427)	31.11 (14/45)	85.71%	-38.67%
50-59	12.39 (70/565)	35.71 (25/70)	80.00%	-22.10%
60-69	13.01 (95/730)	42.11 (40/95)	70.00%	-26.85%
≥70	10.35 (59/570)	57.63 (34/59)	70.59%	-30.61%
<b>Total</b>	10.74 (308/2869)	40.91 (126/308)	76.19%	-36.49%
<b>p-value</b>	0.0043	0.0346	0.3803	0.0590

**People aged 40-49 compared to the other age classes appeared to be most capable of change -38.67% (p=0590)**

## Biological Harm\* and Client's Alcohol consumption changes (N=128) at follow-up

\* Elevated values of Gamma-GT, Transaminases, Triglycerides

Biological Harm	Patients			% of clients reducing Alcohol consumption	% reduction in Alcohol consumption (gms/die)
	Consumption (gms/die)	RD/Enrolled	F-up/RD		
NO	49.16	7.74% (39/504)	76.92% (30/39)	73.33%	-28.71%
YES	63.01	28.46% (105/369)	48.57% (51/105)	74.51%	-29.33%
Total	50.65	16.49% (144/873)	56.25% (81/144)	74.07%	-29.10%
p-value	0.0036	< 0.0001	0.0043	1.0000	0.9443

**The consumption by people with biological harm was significantly higher than people with no biological harm.**

**The presence of alcohol related biological harm induces greater change that in case of no biological harm (42.75 vs 30.70)**

## **Conclusions**

- A good identification of risk drinking clients by GP is a good predictor both of clients being retained in treatment at 1 year follow-up, and of alcohol consumption decrease among clients
- Being woman and middle age, and having a minor alcohol related biological harm is a good predictor of some level of alcohol drinking pattern changes among clients drinking at risk.

# References

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