

# Come preparare un poster

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EpiCentro

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Caro Dott. Piagnone...,

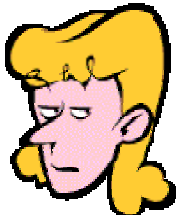
Siamo lieti di informarla  
che il suo abstract è stato  
accettato come POSTER  
all'incontro annuale di .....

Cordiali saluti,

Dott. Arrogante

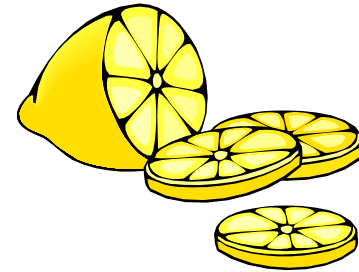


Wah!! Allora non  
sarò mai famoso!!



Smettila di  
lamentarti!!  
Almeno il dipartimento  
ti pagherà il biglietto  
per Parigi

Se Dio ti dà dei limoni ...



...fai la limonata!



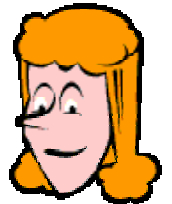
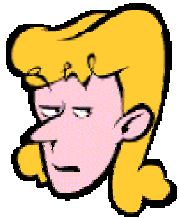
- A una sessione poster, le persone
  - passeggiano
  - sono distratte dalla conversazione, dai vecchi amici, dalle belle donne (o da uomini bellocci)
- Lo scopo del vostro poster è attirare l'attenzione delle persone di passaggio
- Considerate il vostro poster come uno spazio per la pubblicità o un altro mezzo pubblicitario

# Il vostro obiettivo....

Hmm... Posso andare a dare un'occhiata a quel brutto poster laggiù, o posso cercare di incontrare quel tipo belloccio lì dietro! DUH!!



Davvero carina la foto del bimbo su quel poster e una volta tanto non dovrò tirar fuori una lente di ingrandimento per leggerlo. Se tutto va bene vedrò il belloccio più tardi.



# A STATISTICAL METHOD FOR THE ESTIMATION OF CHILDHOOD CANCER PREVALENCE AMONG ADULTS

## 1. Introduction

Prognosis of many childhood cancers is good, and most young patients become long-term survivors. Even in cured patients however, psychological or physical consequences of the disease can persist for their entire life, due to the aggressiveness of the treatments and to the increased risk of subsequent cancers, and need extra medical care or social support. Data on prevalence of childhood cancer in the population are therefore relevant for planning appropriate health resources. Cancer registries are the main data sources for prevalence. These data cover however a limited period of time, often not sufficient to provide complete prevalence estimates. We propose a model-based method to estimate prevalence of individuals that had cancer in their childhood. The method is applied to US data from Surveillance, Epidemiology, and End Results (SEER) Program to estimate the complete prevalence on 1/1/1999 of adult people who have been diagnosed with cancer during their childhood (from 0 to 19 years old).

## 2. The CHILDPREV method

Prevalence is the proportion of people alive at a certain date who have been previously diagnosed with the disease -  $N_x(0, x) = \int_0^x I(t) S(x-t, t) dt$  where:

- $N_x(0, x)$  is the prevalence at age  $x$  of people that had cancer between ages 0 and  $x$ ;
- $x$  is the age at diagnosis;
- $I(t)$  is the incidence hazard at age  $t$ ;
- $S(x-t, t)$  is the relative survival function at age  $x$  of patients who were diagnosed at age  $t$ .

**Data:**  $N_x(x-L, x)$  *L-year limited duration prevalence (LDP)*, obtained by counting the number of patients of age  $x$  who were diagnosed in the past  $L$  years of duration of the cancer registry. We base the estimation of the complete prevalence of adults who have been diagnosed with cancer during their childhood on the following parametric models, which are characterized by a vector of parameters  $\psi$ :

- a polynomial incidence function on a logistic scale:

$$I(t, \psi) = \left[ 1 + \exp \left[ (a_x + b_1(t-t_1) + b_2(t-t_1)^2 + \dots + b_k(t-t_1)^k) \right] \right]^{-1}$$

where  $a_x, b_1, \dots, b_k$  are the parameters of interest. This model is assumed to be equal for all birth cohorts;

- a cumulative relative survival function:

$$S(x-t, t, \psi) = \left[ (1-Q) + Q \exp \left[ -\lambda(x-t)^\beta \right] \right]^{\exp[\beta_1(t-t_1) + \beta_2(t-t_1)^2]}$$

where  $Q$  is the portion of individuals with cancer that will die with a relative survival following a Weibull distribution with parameters  $\lambda, \beta$ ;  $\beta_1$  and  $\beta_2$  are the age and period of diagnosis coefficients.  $Q, \lambda, \beta, \beta_1$  and  $\beta_2$  are the parameters of interest. This model assumes relative survival to be linearly dependent, on a logarithmic scale, of the year of diagnosis and the age at diagnosis.

The CHILDPREV method can be summarized into 3 steps:

- computation of the complete prevalence at age  $x$ , by adjusting the LDP for cases diagnosed prior to the starting date of the cancer registry, using the completeness index:

$$R_x(L; \psi) = \frac{\int_0^x I(t, \psi) S(x-t, t, \psi) dt}{\int_0^L I(t, \psi) S(x-t, t, \psi) dt} \quad \text{from which} \quad N_x(0, x) = \frac{N_x(x-L, x)}{R_x(L)}$$

- computation of the fraction of complete prevalence due to adult cancers. An appropriate completeness index is also applied to estimate those prevalent cases which were not included in the registry:  $N_x(19, x)$ ;

- computation of the prevalence of childhood cancers at adult ages, by subtracting the prevalence of adult cancers (step 2) from the complete prevalence (step 1):

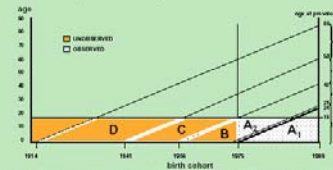
$$N_x(0, 19) = N_x(0, x) - N_x(19, x)$$

## 3. An application

This method has been applied to Acute Lymphocytic Leukemias (ALL). Data from SEER 9 cancer registry, stratified by age at diagnosis, is available for the period 1/1/1975 to 1/1/1999 ( $L=24$  years). The SEER 9 cancer registry data provide:

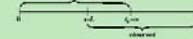
- complete information on patients up until 24 years old on 1/1/1999, (birth cohorts: 1999-1975) -  $A_1$  area on the Lexis diagram;
- partial information on patients between age 25 and 43, (birth cohorts: 1974-1956): they are observed and followed-up if they were diagnosed after 1975 ( $A_2$  area), the number of those diagnosed before 1975 (B area) and alive at 1/1/1999 is estimated;
- no information on patients aged 43+ (born before 1956), because they were diagnosed of childhood ALL before the registration activity (C area).

ALL became curable during the years 1950's. Since then, therapies have dramatically improved. We suppose zero survival for all patients diagnosed before 1950. No prevalent cases older than 55 years (born before 1941, D area) are therefore expected at 1/1/1999.



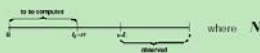
We distinguish two cases:

- $x < 43$



where  $N_x(0, 19; L) = \frac{N_x(x-L, x)}{R_x(L; \psi)} \left[ 1 - R_x(L; \psi) \right] + \sum_{t=0}^x N_x(t)$

- $x > 43$



where  $N_x(0, 19) = N_x(0, x) - N_x(19, x)$

Results are illustrated in the Graph and in Table1 below.

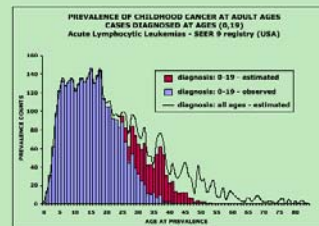


Table1: Prevalence of childhood (N0,19) and all ages (N0,85) ALL - observed and estimated prevalent cases in the SEER registries, population proportion over the total population, and projected number of prevalent cases in the US population

	obs.	est.	obs/est	proportion x 100,000	US projections
N0,19	3081	1024	4.105	15.78	43176
N0,85	3668	815	4.583	16.84	46396

The blue part of the histogram denotes the observed cases diagnosed in the age interval [0,19], the purple part the estimated cases diagnosed in the same age interval, the black line represents the estimated cases irrespective of age at diagnosis (step 1 of the method). The first row of the Table refers to childhood ALL cases, the second row to prevalent cases diagnosed at all ages up to 85 years.

Most of prevalent cases are due to ALL diagnosed during childhood. This is consistent with epidemiological data:

- about 40% of new incident cases are child patients;
- treatment is much more effective in children (5-year survival 80%) than in adults (23%).

Our method estimated that 25% of ALL prevalent cases fall outside cancer registration period in US-SEER data. This proportion is expected to be higher in populations with more recently established cancer registration, such as US non-SEER states or most European cancer registry populations.

Niente JAPOW!!!  
(Journal Article Pasted on Wall)

Quanti di quei poster TU hai mai letto?!?

I grandi marchi pubblicitari riempiono i loro annunci con milioni di parole?!?

Occorre pensare come un pubblicitario: come posso presentare i miei risultati in modo conciso, chiaro e avvincente?

# Cesarean Sections in Campania Italy, 1996-1999

R Pizzuti<sup>1,2</sup>, E de Campora<sup>1</sup>, S Lodato<sup>1</sup>  
<sup>1</sup>Agenzia Regionale Sanità, Campania Region, Naples Italy  
<sup>2</sup>PROFEA, Italy

## Introduction

- Cesarean sections (C-sections) pose a greater risk of maternal morbidity and mortality than vaginal delivery:
  - Morbidity 5 - 20 times higher
  - Mortality 2 - 7 times higher
  - Also associated with increased risk of perinatal mortality
- WHO recommendations:
  - < 15% of deliveries by C-section
  - Relative indications limited to fetal distress, dystocia, breech presentation and previous C-section

## Methods

- Study type: descriptive study
- Data source: comprehensive regional hospital discharge database (SDO) 1996 to 2000
- Variables
  - Age and residence status of mother
  - Type of delivery (vaginal vs. C-section)
  - Characteristics of facility
- Private vs. public
- Deliveries/year (<500, 500-800, >800)

## Setting

- Campania, a large region in Southern Italy (population 5,7 million)
- 65.000 deliveries/year
- > 50% of deliveries via C-section

## Objective

- Analyze trends and risk factors for C-section in Campania

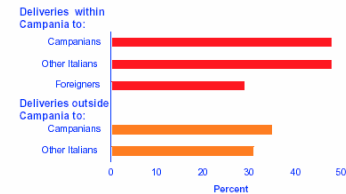


## C- Section by Type of Facility and Volume of Deliveries, 1996-1999

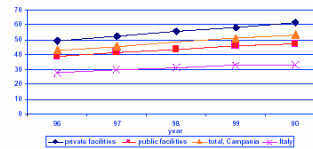
Facility type and volume	Deliveries		Frequency CS
	number	%	
<b>Public facilities</b>	<b>158697</b>	<b>61%</b>	<b>43%</b>
<500 deliveries/year	22082	9%	48%
500 - 800 deliveries/year	32273	12%	45%
>800 deliveries/year	103742	40%	41%
<b>Private facilities</b>	<b>100225</b>	<b>39%</b>	<b>54%</b>
<500 deliveries/year	21317	8%	56%
500 - 800 deliveries/year	31245	12%	55%
>800 deliveries/year	47663	18%	53%
<b>Total</b>	<b>258922</b>	<b>(100)</b>	<b>47%</b>



## C-Section Rates by Residence and Site of Delivery, 1996-2000



## Trends in C-sections 1996-2000



## Recommendations

- Use accreditation process to improve practices
- Develop regional guidelines in collaboration with local ob/gyn community
- Provide information to women and their physicians on appropriate indications for C-sections

## Conclusions

- Rates of C-section among highest in world and increasing
- Highest levels in small private facilities
- Appears related to inappropriate clinical practice



# Concetti fondamentali

- presentare il "succo" del vostro soggetto sotto forma di grafici, cartine, tabelle e figure
- i poster dovrebbero fare il massimo uso di illustrazioni, grafici e fotografie
- utilizzare un testo molto ridotto
- elenchi puntati piuttosto che intere frasi
- non più di 25 righe di testo sul poster

# Pianificazione



- Leggete le istruzioni (duh!!)
  - requisiti di dimensioni
  - tempi di osservazione
  - necessità di includere un abstract? (in caso contrario, evitatelo!)
- Scegliete i tre punti più importanti
- Tracciate uno schema approssimativo del layout (non più di 8 pannelli)
- Direzione del flusso (dall'alto al basso o da sinistra a destra; evitare di far camminare le persone avanti e indietro)
- Mettere gli argomenti di maggiore importanza a livello visivo

# Health Priorities for the Calabria Region, Italy

Salvatore Lopresti, Training Program in Applied Field Epidemiology (PROFEA), Istituto Superiore di Sanità, Rome, Italy  
and Office of Epidemiology and Health Statistics of the Calabrian Regional Health Department, Catanzaro, Italy

## Background:

- Calabria considered poorest and least developed of Italy's 21 regions
- Follows national model of health care services
  - Preventive services free of charge to all
  - Curative services, including medications, free or available with small co-payment
- Outcomes and performance, however, lag behind national values
- Many areas need improvement, but prioritization needed
- Minnesota (USA) Community Service Planning Manual used to develop a regional health profile and a list of the top priorities for additional intervention

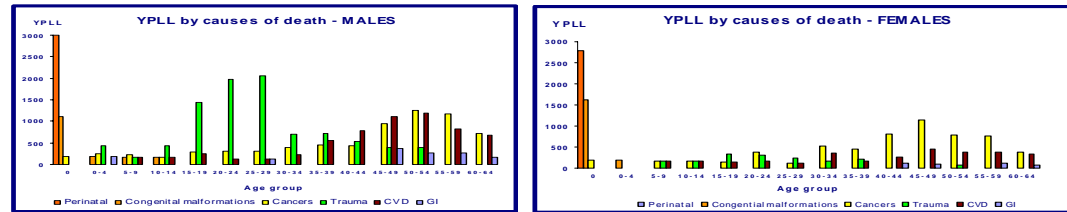
## Steps in the Minnesota Approach

- Define and describe the community
- Obtain community input in prioritization process
- Gather and analyze data on morbidity, mortality, risk factors, services, access
- Translate data into public health problems and their contributing factors
  - Problems may be diseases, conditions, risk factors, or health-service delivery issues
- Prioritize based on agreed-upon set of indicators
  - 8 indicators: Number of persons potentially affected, actually affected, premature mortality (YPLL), impact on quality of life, economic impact, public concern, preventability, gap between needs and resources
  - 3 points per indicator

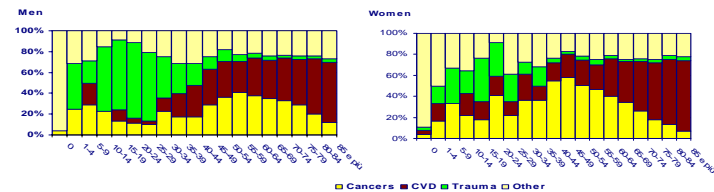
## Data sources and methods

- Morbidity and mortality data from regional hospital discharge summaries
- Mortality and health-related behaviors from the National Institute of Statistics
- Regional surveys
- Interviews with key decision-makers and stakeholders

## Results: YPLL – cut-off 65 years, by age group and sex



## Principal causes of death, by age (%)



## Top 10 Health Priorities in Calabria

Priority	Criterion								Total
	Potentially affected	Actually affected	YPLL	Quality of Life	Economic impact	Public concern	Preventability	Gap needs resources	
Traffic injuries	3	3	3	3	3	3	3	3	24
Maternal-child health	3	3	3	3	3	2	2	3	22
Women's health	3	3	3	3	2	2	2	2	20
Cardiovascular diseases	3	3	2	2	2	2	3	2	19
Health services organization	3	2	1	3	3	2	2	2	18
Health of the elderly	3	2	1	3	2	2	2	1	16
Smoking/pulmonary disease	2	2	3	2	3	1	2	1	16
Obesity and diabetes	2	1	3	2	3	1	1	1	14
Mental health	1	1	2	2	3	1	2	1	13

## Discussion

- Process useful in quantifying level of various health problems that otherwise might have gone unrecognised had morbidity and mortality alone been used as criteria for prioritization
- Obtaining community, decision-maker, and stakeholder input into determining local priorities added different perspective
- List used to set up the regional Public Health Plan

# Contenuto

- Titolo e nomi degli autori (e numero assegnato al poster, se non fornito dagli organizzatori)
- Un abstract di solito non è necessario: quasi sempre è incluso nel libro degli abstract
- Se possibile, fate stampare il poster in modo professionale in un singolo foglio
- Altra alternativa: stampati di diapositive powerpoint o foto di misura 30x42 cm montate su un cartoncino colorato

# Contenuto

- Evitate i caratteri Courier, Roman, Italic; provare a usare Optima, Helvetica o Sans Serif
- Usate un font di almeno 24 punti (dovrebbe essere leggibile a 1-1.5 metri)
- Niente giustificazione!
- Non usate LETTERE MAIUSCOLE per il testo
- Usate il **grassetto** con parsimonia: risulta stancante da leggere
- Usate colori vivaci per i vostri grafici in modo da attirare l'attenzione (evitate però troppi colori).
- Considerate l'uso di fotografie
- Numerate ogni pannello in modo che la sequenza sia chiara
- Non fate il vostro poster troppo pieno e confusionario: poco è meglio

# Presentando il poster

- Preparate il vostro poster in anticipo (portate il vostro velcro o le puntine, caso mai)
- Vestite "con stile": siete parte della "pubblicità"!
- Se possibile, fate copie in A4 del vostro poster da dare come volantino (piace molto!)
- Portate copie del vostro biglietto da visita
- Siate disponibili durante le ore della presentazione del poster
- Siate socievoli: proponete a chi si avvicina al poster di mostrarglielo (approccio pianta carnivora)