

1 - Calculate the risk among bald

Incidence on بالي

$$\frac{775}{10,000} = 0,0775$$

2 - // // // hairy men?

$$\frac{190}{10,000} = 0,019$$

$$3 - \text{Relative risk} = \frac{0,0775}{0,019}$$

$$= 3,947 \approx \underline{4}$$

Bald men are 4 times at greater risk to develop CHD than hairy men

4 - this result isn't enough to suggest that baldness is associated with CHD  
So we should test multiple confounding variables associated with both, the exposure ((baldness)) and the disease ((CHD)) - Confounding Variables

could include: Age, genetic, hormonal factors, Diabetics, medications used

وأيضا

5 - Age could be the main associated cause for (CHD) and not balding itself, which means that if we stratify

the data according to age then

Relative risk will not be clear

relative rate value will be close  
to 1 (if age was a true confounding  
factor)

6 - Incidence of CHD in older men  
$$= \frac{850}{8,500} = 0,1$$

- Incidence of CHD in younger subjects

- 115

- 1

$$\frac{11,500}{11,500} = 0,01$$

CHD is age related because

$$0,1 > 0,01 \text{ A LOT}$$

\* Conclusion: it is Confounded by Age

7- baldness Proportion of older men?

$$= \underline{7,500}$$

8,500

- " " " Younger men?

= 2,500

11,500

Conclusion: there is association between Age and balding.

توجد علاقة بين العمر والتساقط  
Confoundling Variable لا يمكن تجاهلها

disease  $\downarrow$   $\rightarrow$  Exposure  $\downarrow$   $\rightarrow$  Association

8 - We should find the Relative rate for each stratum :-

1 - Older Subject RR :-

$$= \frac{\frac{750}{7,500}}{100} = \frac{0,1}{0,1} = 1$$



1000

2- Younger subject RR:

$$\approx \frac{\frac{25}{2500}}{\frac{90}{9000}} = \frac{0,01}{0,01} = 1$$

\* لاحظ كيف ال RR اختلف بعد stratification

Conclusion: association between

baldness and CHD is clearly confounded  
by the age

9- RR of CHD associated with balding  
in older stratum equals 1

Conclusion: elimination of balding  
will have no effect on CHD rates

10.  $c \frac{1}{501} \frac{100}{100}$

پرفہ تکرار لکھائی فوق - 11