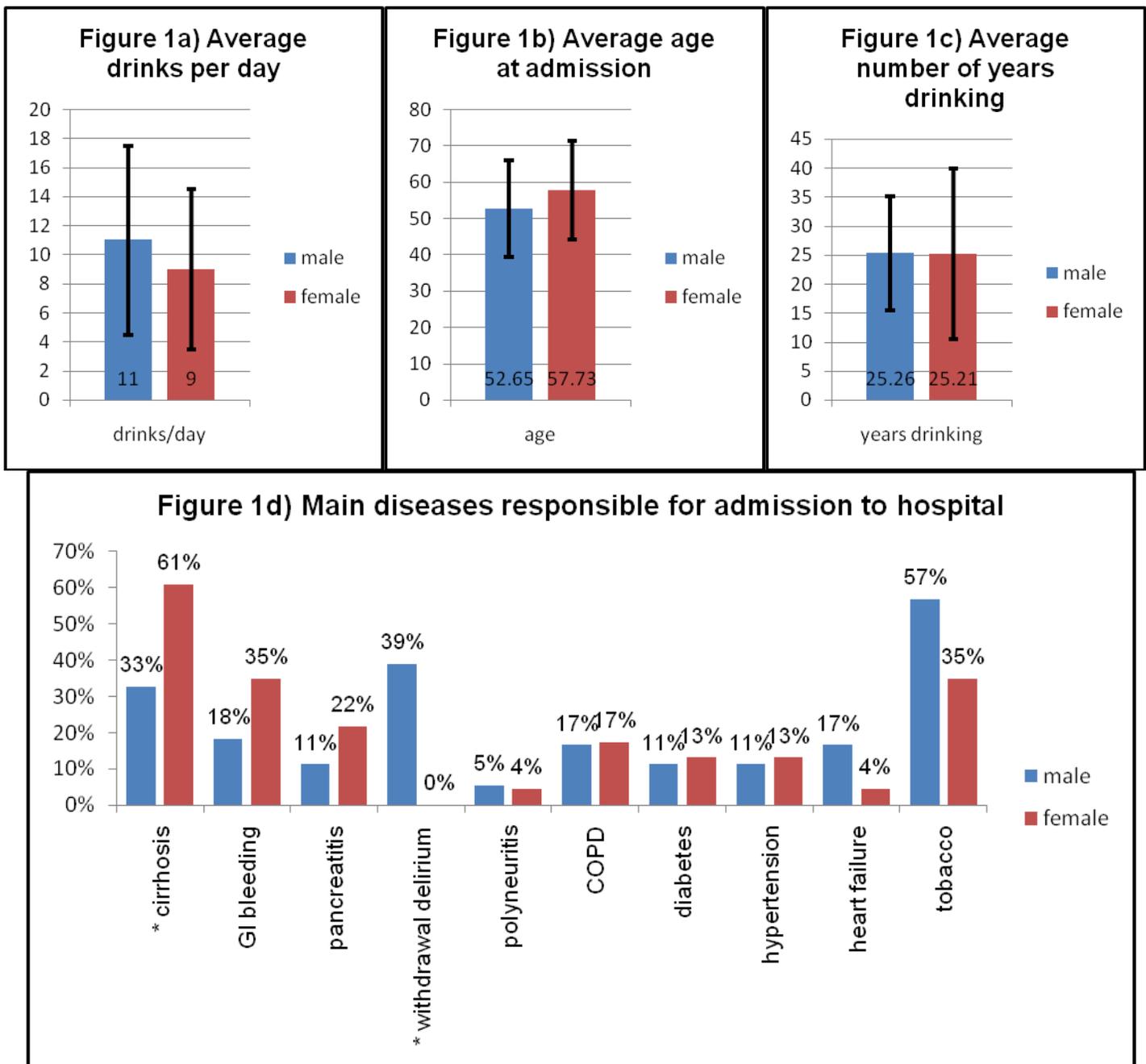


Gender, Mortality, and Heavy Drinking

Introduction

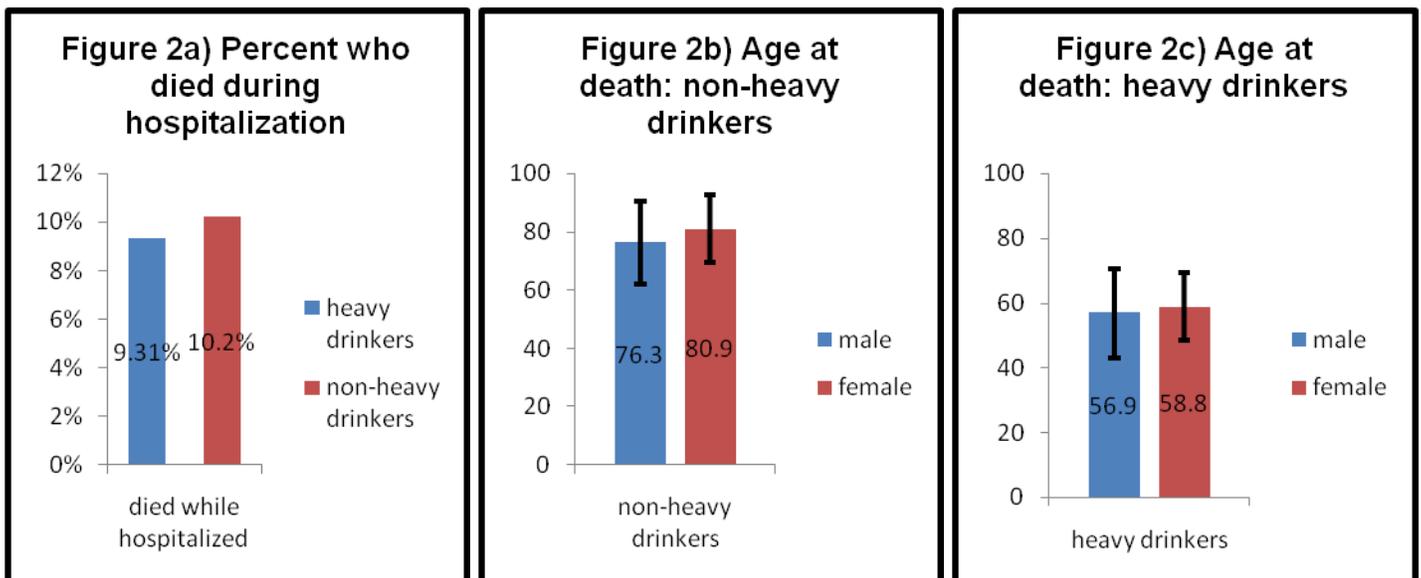
In 1998 and 1999 Dr Jarque-Lopez and his colleagues conducted a study which recorded drinking data for every patient admitted into the University Hospital of the Canary Islands. Over this two year period 2913 admissions were made to the hospital. Of these admissions, 224 men and 23 women met Dr Jarque-Lopez's criteria for being heavy drinkers. Figure 1a gives the average number of drinks consumed per day, Figure 1b gives the average age at admission to the hospital, Figure 1c gives the average number of years drinking, and Figure 1d gives the reasons for hospital admission.



In this study the women heavy drinkers reported drinking an average of just under two bottles of wine (9 standard drinks = 129g ETOH) per day 7 days a week. The men heavy drinkers reported drinking an average of just over two bottles of wine (11 standard drinks = 153g ETOH) per day 7 days a week. The error bars on the graph show that some drank far more than this and some far less. The average age of admission was around 52 years old for men and 57 years old for women. Both men and women reported that they had been drinking for an average of around 25 years.

When we look at the reasons for hospital admission we find that only two reasons show statistically significant differences. A significantly larger number of women were admitted for **cirrhosis** than were men ($p = 0.008$). And a significantly larger number of men were admitted for **withdrawal delirium** than were women ($p < 0.001$). However, since the number of women in the sample (23) is small we can draw no conclusions about how much more common these sex related maladies are--a much larger sample is needed for this.

Next we will take a look at mortality rates. There was no significant difference between the number of heavy drinkers who died while hospitalized and the number of non-heavy drinkers who died while hospitalized--mortality rates were around 10% for both populations. This is illustrated in Figure 2a. There was also no significant difference between the percentage of male and female heavy drinkers who died while hospitalized. However, there was a significant difference in the average age of heavy drinkers who died while hospitalized when compared to non-heavy drinkers ($p < 0.0001$ for both male and female). This is illustrated in Figure 2b and Figure 2c.



Conclusion

Although popular writers on the topic of alcohol claim that alcohol takes a far greater toll on women than men in terms of health consequences and longevity, this is not borne out by the data from Dr Jarque-Lopez. These data tell us that whereas male heavy drinkers are more likely to have problems with alcohol withdrawal, female heavy drinkers are more likely to have problems with cirrhosis.

These data show that both male and female heavy drinkers who were hospitalized died at a significantly younger age than hospitalized non-heavy drinkers. However, female heavy drinkers did not die at a younger age than male heavy drinkers. The average age of the female heavy drinkers in this study who died was actually greater than that of the males although the numbers were not significant.

Dr Jarque-Lopez and colleagues also point out that we must be cautious in drawing conclusions about what these data mean for populations who are not in the hospital. Some studies suggest that there may be less difference in age at death for these populations in other settings.

REFERENCES:

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