Mediterranean Nights

Violence and unintentional injury in young holidaymakers

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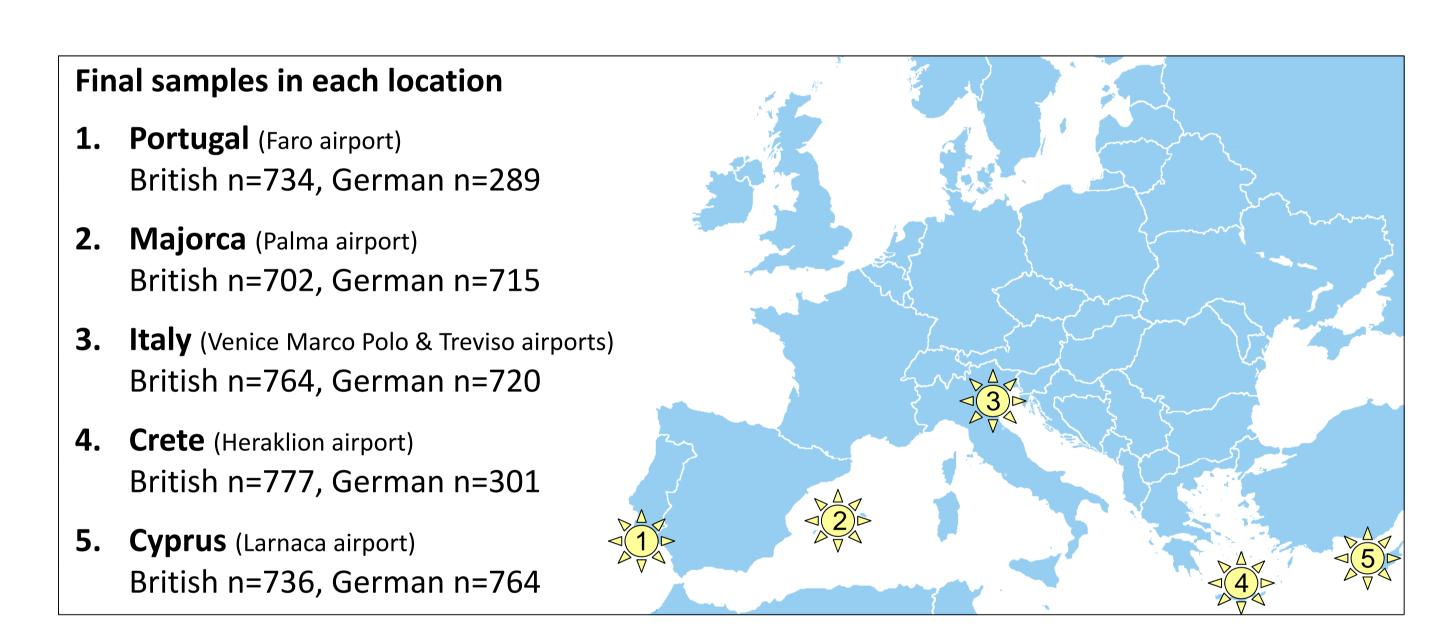
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Introduction

Every summer millions of young Europeans take vacations in Mediterranean holiday resorts. Research has shown that young people's alcohol and drug use increases during holidays abroad.^{1,2} Despite the strong associations between substance use and both intentional and unintentional injury, however, few studies have explored injury and violence among young holidaymakers. One study calculated that, across all ages, injuries sustained by non-domestic tourists in EU countries accounted for an estimated 3,800 deaths, 83,000 hospital admissions and 280,000 emergency department treatments annually.3 To better understand the risks of injury in different destinations, and factors associated with violence and unintentional injury in holidaymakers, we conducted a cross-sectional study of young British and German holidaymakers visiting five Mediterranean destinations in the summer of 2009 (July-August).

Methods

A short anonymous questionnaire was delivered to holidaymakers aged 16-35 in airport departure areas as they waited to check in to flights to the UK or Germany. The questionnaire (produced in both languages) covered: holidaymakers' characteristics; reasons for destination choice, substance use on holiday and at home; and whether they had experienced a range of problems on holiday, including unintentional injury (have you been injured in an accident?) or involvement in violence (have you been involved in a physical fight?). Of 11,417 individuals approached, 35% declined to participate before being provided with any survey details. Among the 7,391 who listened to a survey explanation, compliance was 92.5%. Self-completed questionnaires were sealed in envelopes by participants for collection by researchers. Data were entered into an SPSS database in the UK and analysed using chi squared and logistic regression. The final sample was 6,502 (see Box).



Findings

Samples varied by gender and age, with a greater proportion of females recruited in Italy and a younger sample obtained in Majorca. Mean length of stay in the holiday destination was 8.9 days. Nightlife was the most common reason for choice of holiday destination in British visitors to Crete and visitors of both nationalities to Majorca. Those visiting Cyprus and Portugal (and Germans visiting Crete) were most commonly attracted by the weather, and those visiting Italy by culture. The vast majority of participants had used alcohol on holiday and over two thirds reported having been drunk (Table 1). Frequent drunkenness (drunk on at least half of the days of stay) was most commonly reported by British holidaymakers in Crete (75.9%) and Majorca (71.0%). Half of participants smoked on holiday and over one in ten used illicit drugs (Table 1).

Table 1: Percentage of participants reporting substance use during their holiday

	British					German				
	Majorca	Crete	Cyprus	Portugal	Italy	Majorca	Crete	Cyprus	Portugal	Italy
Drank alcohol	98.4	99.4	99.5	92.8	90.3	96.9	98.0	100	91.7	82.5
Got drunk at least once*	92.0	94.6	81.8	69.8	52.8	79.6	53.6	82.0	59.0	25.1
Used illicit drugs	8.9	4.1	18.9	10.8	12.1	7.5	11.0	16.6	20.1	4.3
Cannabis only	2.7	1.2	6.4	6.8	11.2	4.1	9.0	9.7	11.8	3.9
Other drugs*	6.2	2.9	12.5	4.0	0.9	3.1	2.0	6.9	8.3	0.4

*Drunkenness was self-defined; 'Other drugs' includes ecstasy, cocaine, amphetamines, ketamine and GHB. Individuals using cannabis and other drugs are included in the 'other drug' category only; All differences were significant except for those between nationalities in: alcohol use in Majorca and Portugal; drunkenness in Cyprus.

Overall, 3.8% of participants reported involvement in violence during their holiday and 5.9% reported unintentional injury. Proportions experiencing these problems varied signficantly across locations (Fig 1 and 2). The highest levels of both violence and unintentional injury were seen in holidaymakers visiting Majorca (both nationalities), and British holidaymakers to Crete. Around one in eight British visitors to Majorca and Crete, and almost one in ten German visitors to Majorca, reported unintentional injury during their holiday.

Fig 1: % reporting involvement in violence

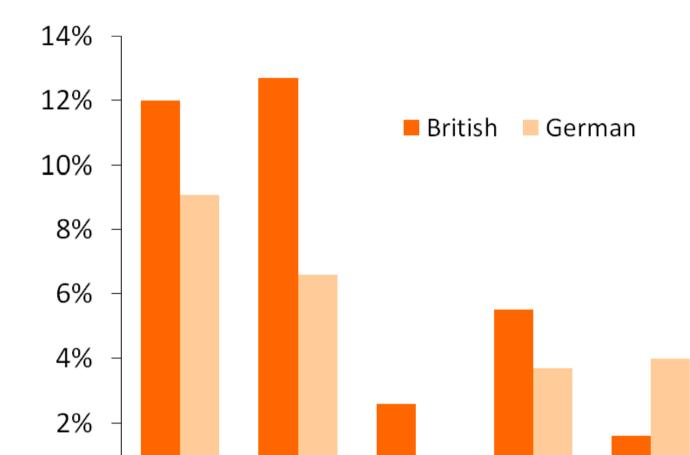
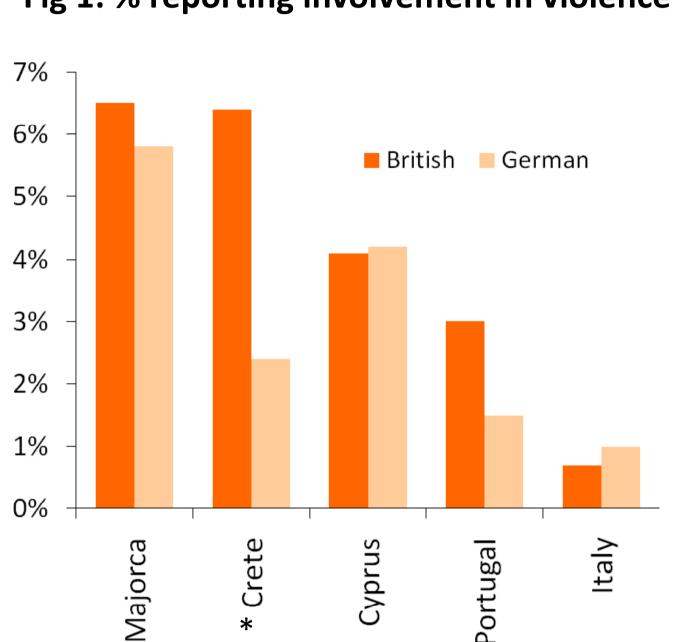
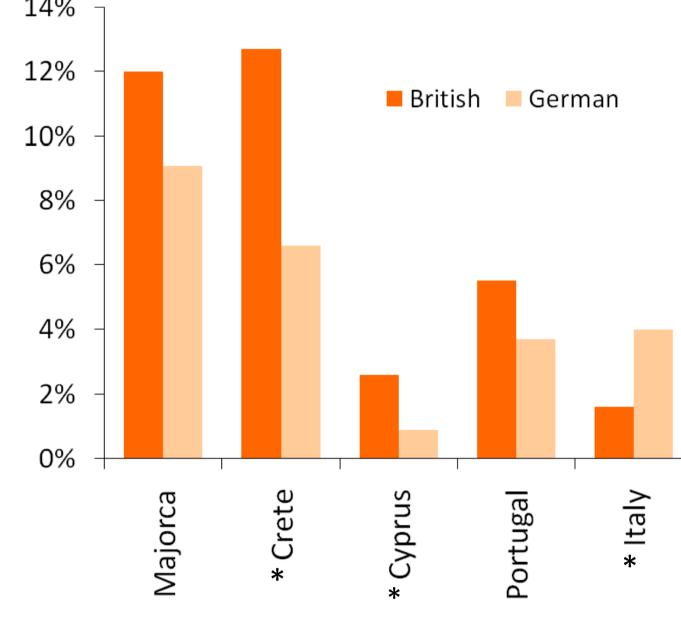


Fig 2: % reporting unintentional injury

* Differences between nationalities are significant (P<0.05)





Chi squared analysis found that both violence and unintentional injury were significantly higher in males and decreased with age. Drinking alcohol on holiday was associated with violence but not unintentional injury. However, frequent drunkenness and use of illicit drugs were both associated with both violence and unintentional injury (Table 2). Logistic regression analysis found that violence was independently associated with being male, choosing the destination for its nightlife, staying 8- 14 days, smoking and using illicit drugs on holiday, frequently getting drunk, and visiting Majorca (both nationalities) or Crete (British only). Predictors of unintentional injury were being male, younger, using drugs other than just cannabis on holiday, frequent drunkenness and visiting Crete.

Table 2: % reporting violence and unintentional injury by frequency of drunkenness and use of illicit drugs during the holiday

		Viole	ence	Unintentional Injury		
Frequency of drunkenness on holiday	Never	0.6	<0.001	2.5	<0.001	
	<50% days of stay	2.8		2.8		
	=>50% days of stay	7.3		11.4		
Illicit drugs used on holiday	None	2.7	<0.001	5.4	<0.001	
	Cannabis only	11.3		5.9		
	Other drugs	14.8		14.7		

Discussion

Mediterranean destinations attract young holidaymakers with different behavioural characteristics for different purposes, and these are reflected in the behaviours they engage in abroad. Such information can be used to implement action to protect holidaymakers' health. Even after controlling for participants' demographics, substance use and holiday nightlife habits, individuals visiting Majorca and Crete showed greater risks of violence and unintentional injury. This suggests that other aspects of the environment in these destinations, or the individuals that choose them, is contributing to higher harm. For example, youth-focused resorts can feature many environmental risk factors for alcohol-related harm, such as large concentrations of bars and nightclubs, cheap drinks promotions and entertainment focused around drinking and promiscuity. Despite this, interventions to protect health and prevent harm in young holidaymakers are scarce. Holidaymakers can fall into a health and safety policy vacuum while abroad; they are not residents (and therefore long-term concerns) of the countries they visit and while away from home their behaviour is largely beyond the jurisdiction of authorities in their home countries. However, violence and injuries can place major burdens on services and communities in resorts, while their longer term health impacts return home with the holidaymaker. The pressures that hedonistic youth tourism place on resort communities and young people's longer term health have yet to be measured against the benefits of this model of tourism. Developing this understanding should be a key research priority.

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^{1.} Bellis MA et al. Relative contributions of holiday location and nationality to changes in recreational drug taking behaviour: a natural experiment in the Balearic Islands. Eur Addict Res 2009; 15:75-86.

^{2.} Hughes K et al. Alcohol, drugs, sex and violence: health risks and consequences in young British holidaymakers to the Balearics. Adicciones 2009; 21:265-278.

^{3.} Bauer R et al. Scope and patterns of tourist injuries in the European Union. Int J Inj Contr Saf Promot 2005; 12:57-61.