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The Sexual Health of Cruise Ship Crews

Dr Michelle Thomas

Background

The cruise industry is one of the world's growth industries. Within the maritime industry cruise shipping has exceeded the growth of any other sector since the mid-1980's (Mather, 2003). In the period 1980-2001 the number of cruise ships in the world fleet increased from 147 to 372, a growth rate of 153%. When considered in terms of total gross tonnage (gt) the increase has been even more considerable, increasing from 2,045 000 (gt) to 8,939 000 (gt), representing a growth of 337% in this period. Passenger capacity has also increased considerably, from one and a half million in 1980 to 12 million in 2001, a growth of 700% (Mather , 2003).

Cruise shipping is a labour intensive industry. Ships are often crewed by several hundred seafarers, with ratios of crewmembers to passengers typically being in the region of 1:2 or 1:3 (Mather, 2003). The contemporary cruise industry is a globalised industry and this is reflected in the multi-national nature of ships' crews. Data from SIRC's cruise ship database showed seafarers of 99 different nationalities (Wu 2005). Although traditionally a male-dominated industry, the rapid expansion of the cruise sector of the shipping industry has created new employment opportunities for women seafarers, especially in the 'hotel' and catering departments. The SIRC database shows that in the year 2000 19% of the cruise labour force were women (Wu, 2005).

Cruise ship crews and health

Seafarers are a residential workforce and are in the unusual position of being largely dependent on their employers and workplace for providing health care. In contrast to ships in the cargo sector, cruise ships will typically sail with at least one qualified medical professional on board who will be available to both passengers and crew for consultation and treatment. Opportunities to utilise independent medical facilities ashore will vary according to an individual's position on board and the ship's schedule. In general, those working aboard cruise ships have more opportunities to go ashore than those working aboard cargo vessels as port stays of a reasonable duration

are an inherent feature of a cruise schedule. However factors such as long working hours, high work loads and decreased crew sizes may all serve to reduce opportunities for shore leave, as have increased port security restrictions and regulations brought about by the events of 'September 11' (ITF, 2003).

There is little available research on seafarers' health and safety and where this research does exist, the focus has tended to be on the cargo, rather than cruise sector of the industry (see Bloor et al., 2000). The research that has been conducted on cruise vessels has tended to focus on passengers rather than crews (see for example, Dahl, 2001; Peake et al., 1999). One aspect of health that may be of particular concern to those working on cruise vessels is sexual health and that associated with sexual behaviour (Belcher et al., 2003). As women have entered the workplace in increasing numbers and workplaces have become less segregated by gender, the issue of workplace (hetero)sexual relationships has begun to receive increasing academic attention. Cruise ship seafarers are no different to other workgroups in that such relationships may occur. However there are some factors that may make seafarers more likely to engage in workplace sexual relationships than their shore based contemporaries. Seafarers working on cruise ships are removed from family and partners ashore for extended periods (often six months or more) and it is argued that people living by themselves are more likely to engage in casual sexual encounters than people living with a steady partner (Hendriks, 1991). Research also suggests that for women, working away from home overnight is associated with higher numbers of sexual partners (Wellings et al., 1994). Seafarers are also unusual in that their work necessitates that they share not just a workspace, but also living space with their co-workers. Such conditions may predispose towards workplace sexual relationships.

Couple relationships typically include physical intimacy, and for many, sexual intercourse is a central component of physical intimacy in this context. Sexual intercourse is an activity which is associated with pleasure, however it is also an activity that has an associated number of risks. Over the last two decades HIV has typically dominated public health agendas as the major risk associated with sexual relations. However other sexually transmitted infections (STIs) are also of considerable concern, and whilst usually treatable, are often asymptomatic. Left untreated these can result in serious health problems such as reduced fertility, and in

some cases even death. In addition, prior infection with STIs such as gonorrhoea and chancroid is known to increase the transmissibility of HIV. For women the occurrence of an unwanted pregnancy is a further risk associated with heterosexual sexual intercourse. Sexual intercourse may also carry social risks, such as the stigma associated with pre, or extra, marital sexual relationships or multiple sexual partners. Finally, and not inconsequentially, there are emotional risks associated with sexual relations, these relate to forms of sexual violence including coerced or forced sexual intercourse (rape) and sexual harassment.

This paper reports on the findings of a study concerned with the health and sexual health of men and women working on board cruise ships. It considers sexual behaviour in terms of private and commercial sexual partners and examines levels of condom use as a measure of sexual risk.

Methods

Data for this study was collected at two major cruise ports, Southampton, UK and Port Everglades, USA. Researchers were based at British & International Sailors Society (BISS) premises in Southampton and Casa del Marino, Port Everglades. These centres provide recreation and, in the case of BISS, hotel facilities for seafarers visiting the port; they are predominantly welfare organisations and attract seafarers of all denominations and none.

Eligibility for participation in the study was restricted to crew on cruise ships. Seafarers were given a short introductory leaflet on the Seafarers International Research Centre and the study. They were given an opportunity to read the leaflet and were asked if they were willing to answer a short, anonymous and confidential 20-minute interview schedule on the topic. Those who agreed to participate were then escorted from the public area of the premises to a private area where they were given a full information sheet. Those seafarers willing to participate were interviewed immediately, since they typically were not able to commit to return to the BISS/ Casa del Marino at an agreed later date. On the advice of one of the port chaplains at Casa del Marino, all seafarers who participated in the study were given a \$10 phonecard in recognition of their time and contribution to the study.

The interview schedule and procedure were based in part on the National Survey of Sexual Attitudes and Lifestyles (NATSAL) survey on this topic (Wellings et al., 1994), which was extensively piloted with particular attention being paid to interviewee acceptability. Additional questions were developed from an instrument successfully used to collect data on the sexual risk behaviour of international travellers (Bloor et al., 1998). Separate instruments were designed for male and female respondents, however the majority of questions were common to both instruments, with some additional gender-specific questions in each (for example women were asked about pregnancy and male respondents about commercial sexual relationships). All women were interviewed by a female researcher and male seafarers were interviewed by either a male or female researcher, as has been found to be acceptable in other studies of sexual behaviour (Bloor et al., 1997; Spencer et al., 1988). Interviewees were warned at the outset about the sensitive nature of the questions and reminded of their right to refuse to answer. English was anticipated to be the second language of the great majority of the interviewees, however English is the international language of the sea and facility in English would have been an employment requirement. Therefore it was considered unnecessary to translate the schedule or use 'native' interviewers. The interview schedules were piloted prior to beginning the main study, with particular attention paid to comprehension and the acceptability of questions.

Data collection took place between August 2002 and February 2003. The achieved sample was 192. The overall response rate for the study was 49%. A higher number of refusals were received at the Port Everglades than Southampton (response rates of 40% and 65% respectively). The response rate in Port Everglades may have reflected changes in the industry following 'September 11'. Significantly increased port security measures considerably detracted from the time crew had available to spend ashore, and consequently many had only 30 minutes or less before they had to return to their ship, making participation in the study problematic. Those seafarers using BISS were usually staying overnight prior to joining a vessel and therefore typically had more time at their disposal. Women were slightly more likely to agree to participate in the study compared to men, with response rates of 53% and 48% respectively. Where possible, the researchers recorded reasons for refusal and in the

majority of cases these related to having insufficient time to take part, or in the case of those staying at BISS, the need to rest after a long journey (many having just completed a long haul flight). No one gave the sensitive nature of the study as a reason for not taking part. Responses to individual questions were high and the design of the questionnaire included in-built checks for consistency of reporting (for example, on number of sexual partners and use of condoms and contraceptives). Consistency was found to be high.

Findings

Sample Characteristics

The sample was made up of 158 (82%) men and 34 (18%) women. These proportions reflect those of men and women aboard cruise vessels in the industry as a whole (Wu, 2005). Participants ranged in age from 20 to 61 years. The mean age of the sample was 33 years. Women were more likely than men to fall into the younger age range: 38% of women were aged between 20 and 25 years compared to just 17% of men. Just over half the sample (54%) were married at the time of the interview, and one third (33%) were single. A further 5% were co-habiting, 6% were separated or divorced and were 1% widowed. Women were more likely than men to be single, separated or divorced, and men were more likely than women to be married. The higher proportion of married men in the sample may reflect the difference in average age of male and female seafarers: women working onboard ship are on average younger than their male colleagues (Wu, 2005) and those in younger age groups are less likely to be married. Over half of the sample (59%) had children. Of these, thirty eight percent had one child only, 27% had 2 children and 35% had three or more children. The largest national groups in the sample were Filipinos and Indians, constituting, respectively, 31% and 20% of the total sample. Nine percent of the sample were from Honduras with a further 11% from other regions in Latin America. These figures differ slightly from those found in a larger scale survey of the industry which reported 29% of cruise seafarers from the Philippines, 5% from India, 5% from Honduras (Wu, 2005).

Respondents were asked about their position on board during their current (or most recent¹) trip. Unlike cargo vessels, cruise ships require high numbers of staff, and many positions demand no maritime experience or qualifications. The largest single occupational group within the sample were restaurant stewards comprising 17%, the second largest group were bar and restaurant waiters (12%) and the third largest, 'utility workers' (11%), cabin stewards comprised 10% of the total sample. Nine percent of those interviewed were in the marine department, 2% of the sample were Marine officers.

Sexual Behaviour

Data was collected on a range of sexual relationships including private² sexual relationships on board ship and in port; commercial sexual relationships in port and at home (men only³) and casual and regular sexual partners at home.

Total number of sexual partners

Respondents were asked about total number of partners in the last 12 months. This figure included casual and regular partners, both at home and onboard, and commercial partners (prostitutes) in the respondent's home country and in international ports. Number of sexual partners is an important way of measuring levels of sexual activity and potential exposure to STI's. The number of partners for seafarers in this sample over the previous one year period ranged between 0 and 70. The mean number of sexual partners in the last 12 months was 2.26 and the median number of sexual partners 1. Ten respondents (6%) had not had sexual intercourse with a partner in the last 12 months. Thirty nine percent of respondents had had 2 or more partners in the last 12 months.

The range in the number of sexual partners in the last 12 months was greater for men than for women, with men reporting between 0 and 70⁴ partners (mean 2.45, median

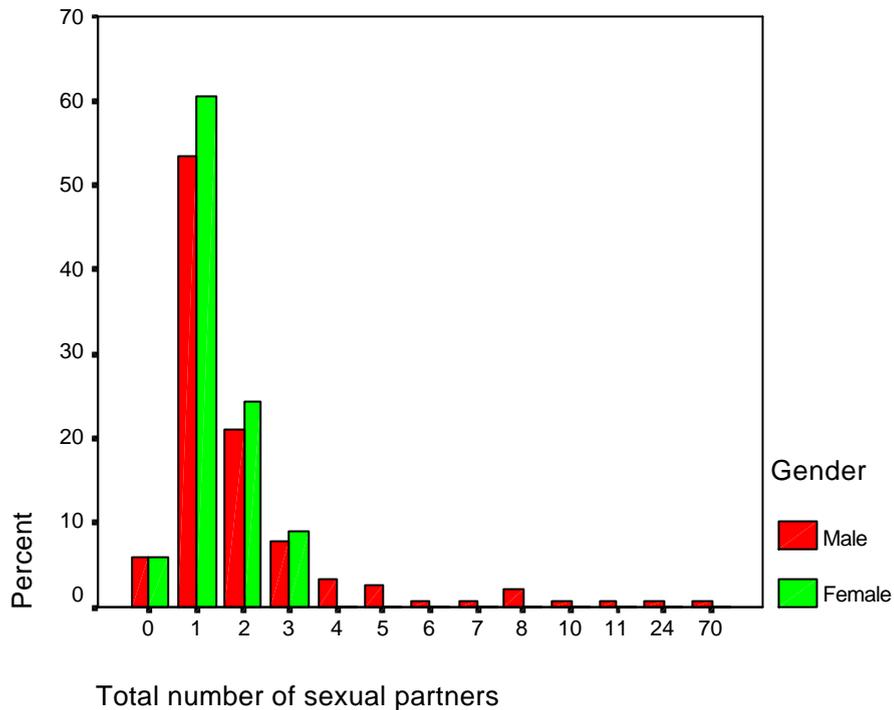
¹ Seafarers interviewed at the point of joining a vessel to begin contract were asked about their experiences on their most recent trip. Those seafarers currently on a contract were asked about their experiences on their current trip.

² Private sexual relationships refer to non-commercial sexual relationships.

³ Women were not asked about commercial sexual relationships as existing literature suggested that cases where women had paid for sex would be extremely rare.

⁴ Seventy partners was an 'outlier' with most respondents reporting between one and three sexual partners in this time period.

1) and women reporting between 0 and 3 partners (mean 1.36, median 1). However this difference was not statistically significant.

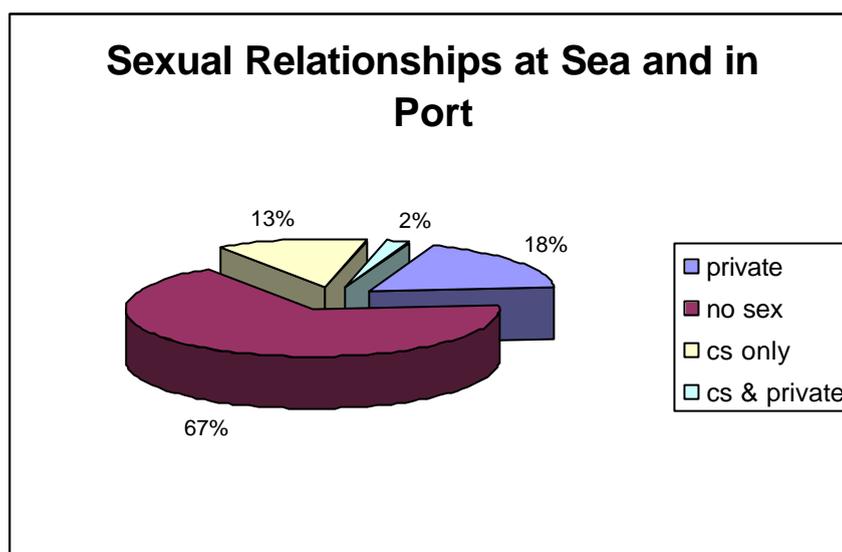


Just over three quarters (77%) of the sample had a regular sexual partner in their home country at the time of the interview. There was a statistically significant relationship between having a regular sexual partner at home and gender ($X^2=16.747$, $df=1$, $p<.01$). Ninety six percent of men and seventy one percent of women reported having a regular sexual partner at home at the time of the interview.

Eighteen percent of respondents reported having had sexual intercourse with a casual partner in their home country in the last 2 years. Not surprisingly, those who were married were less likely to report a casual partner at home in the last two years: 14% of married and 27% of those who were unmarried reported having sex with a casual partner in their home country in the last two years.

Sexual relationships at sea and in port

One third of the sample (33%) reported having sexual intercourse during their current/ most recent trip. Of the total sample, 18% (34) had private sexual relationships only, 13% (24) had commercial sexual relationships only and 2% (3) had both private and commercial sexual relationships during their last trip.

*Private sexual relationships*

The number of sexual relationships during the current/ most recent trip ranged from 0 and 50⁵. Seventy nine percent of those who reported having a relationship on board the ship reported having one partner only, 14% reported having two partners during the trip and the remaining 7% reported three or more partners during the trip. Half the sample (50%) reported engaging in sexual intercourse 10 times or less with their most recent ship board partner. Women were more likely than men to report a private sexual relationship on their trip: 16% of men and 39% of women reported private sexual relationships on their trip and this difference was found to be statistically significant ($X^2=9.003$, $df=1$, $p<0.01$). The private sexual relationships that occurred were predominately with other crew members. Fourteen percent of the private sexual relationships reported on board were with passengers.

Commercial sex

Documenting commercial sexual relationships is important for a number of reasons. Commercial sex workers (prostitutes) have been identified as important 'core groups' in understanding the spread of sexually transmitted diseases such as gonorrhoea (York et al., 1978) and more recently, HIV (Plummer et al., 1991). Relatedly, it has been suggested that travel workers may also play a crucial role in epidemic spread, by providing a 'bridge' between prostitute populations (Carswell et al, 1987). Male respondents were asked about commercial sexual relationships whilst working at sea in the last 2 years and over their last trip. Over one quarter (29%) of men in the sample reported having paid for sex during the last two years whilst working away on a ship. One fifth (20%) of men reported having paid for sex on their current/ most recent trip. Of those who had paid for sex during their most recent trip nearly one third (30%) had paid for sex on this trip once only, approximately one third (33%) twice and just over a third (37%) reported paying for sex three times or more. Respondents were asked about the last country they were in when they paid to have sex. A wide range of countries in varying world regions were reported including Spain, Israel and China. The most commonly reported country was Brazil reported by 18% of respondents, Columbia (reported by 10% of respondents) and Spain (10%). There was no statistically significant relationship between marital status, nationality, length of sea career and having commercial sex on current/ most recent trip.

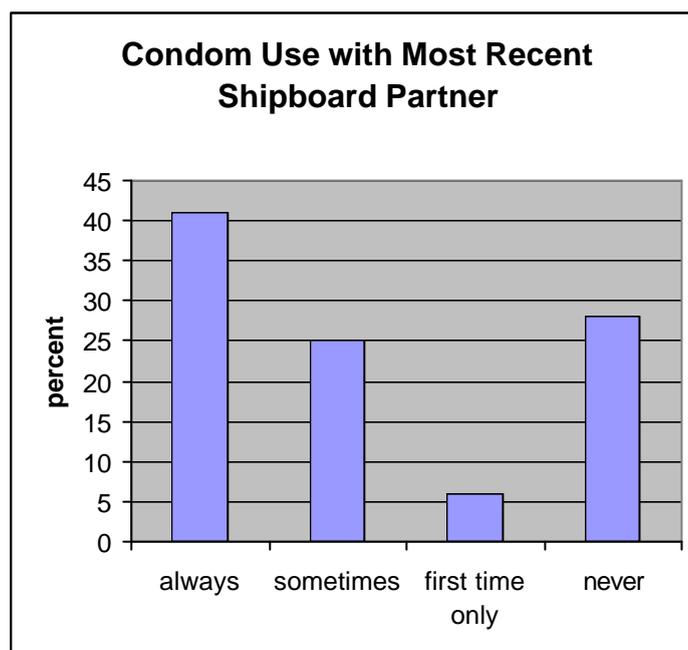
Whilst reports of commercial sex whilst working at sea were high, only a very small number of seafarers reported paying for sex whilst in their home country (4%).

Sexual risk*Private sexual relationships*

Less than half (41%) of those who reported private sexual relationships during their trip reported using condoms every time they had sexual intercourse with their most recent partner on the trip, 25% reported using condoms on some occasions, 6% reported using condoms the first time only, and over one quarter (28%) reported never using condoms with this partner. There was no statistically significant relationship

⁵ Fifty was an 'outlier'. Others who reported private sexual relationships on their trip reported between 1 and 4 partners.

between condom use and age, marital status or nationality. There was some evidence of a relationship between gender and condom use, men were more likely than women to report always using condoms (55% and 16% respectively) although this relationship was not statistically significant ($X^2=5.058$, $df=2$, $p=.08$). There was no statistically significant relationship between women bringing the contraceptive pill on board ship and whether or not they used condoms.



Commercial sexual relationships

All those who reported having paid for sex whilst working away in the last 2 years reported using a condom the last time they paid for sex, as did those who reported paying for sex in their home country.

Condom use and regular sexual partners at home

Those respondents with a current regular sexual partner at home were asked about condom use with this partner. Reported levels of condom use within these relationships was low: only 10% reported always using a condom when they had sexual intercourse with this partner, 28% reporting using condoms only sometimes and 62% never used condoms with this partner.

Forty five percent of those with a current regular partner reported using condoms on all the occasions they had sexual intercourse with a new partner met on the ship compared 60% of those who had no current regular sexual partner⁶.

Discussion

The data from this study show that seafarers working on cruise ships are a sexually active group with a relatively high number of sexual partners. Thirty nine percent of seafarers in this sample reported having two or more sexual partners in the last 12 months. Comparative international data is not available, however these figures are notably higher than those reported by men and women (aged between 16 and 59 years) in the UK NATSAL study, where 6.8% of women and 13.8% of men reported two or more partners in the last twelve months (Wellings et al., 1994).

The levels of reported commercial sexual activity are also high compared to reports by the general population. EC data on (heterosexual) males between 18 and 45 years show reports of having paid for sex in the last year to be at 0.6% for UK, 4.6% West Germany, 2.8% for the Netherlands, 1.8% for Norway and 11.0% for Spain (Leridon et al, 1998). Indeed, respondents were much more likely to report having paid for sex whilst working at sea than during their time ashore in their home country. Whilst reports of commercial sexual activity were high, so too were reports of condom use. Indeed ALL seafarers reporting sexual intercourse during their last trip reported using condoms on the occasions they paid for sex. This suggests that sexual health education efforts with this group regarding the risks associated with commercial sex have been effective⁷. However, given the wide extent of commercial sexual activity and the relatively high turnover of cruise ship staff, it is vital that these efforts are continued.

These data suggested that sexual relationships do occur between crewmembers, and in a small number of cases, between crewmembers and passengers. It is well

⁶ Cell sizes were too small to test for statistical significance.

⁷ An alternative explanation is that prostitutes visited by seafarers have received effective health education and are sufficiently empowered to insist on condom use with all their clients.

documented that people are more likely to use condoms in relationships that they consider to be 'casual' as opposed to 'regular' and 'romantic'. Therefore, it is perhaps not surprising that levels of condom use reported with private sexual partners on cruise ships were low: less than half of those who reported private sexual relationships on their trip reported using condoms on all the occasions when they had sexual intercourse with their most recent partner. Women were less likely to report always using condoms than men. These private sexual relationships are not without risk to the individuals involved. Seafarers may be putting themselves at risk of STI's as well as at risk of unwanted pregnancy. Furthermore, these potential exposures have subsequent risks for sexual partners at home: a high proportion of seafarers reported regular sexual partners at home with whom they did not use condoms, thus STI's contracted onboard and left undetected or treated may have a route to pass to shore-based partners.

Many of the risks associated with sexual intercourse are not immutable. The risk of contracting sexually transmitted infections can be significantly reduced by the use of condoms and unwanted pregnancies can be avoided by the use of effective contraceptives. The consequences of health risks associated sexual intercourse will also be affected by access to medical care and advice. Professional medical assistance may be required for screening and diagnosis of STI's and pregnancy and may also be necessary for the dispensing of certain contraceptives such as the contraceptive pill, the diaphragm/cap and IUD (Intrauterine Device)/coil. Restricted access to such care, whether through cost, logistic issues, concerns relating to confidentiality, or perceived skills of the medical professional, will all serve to potential amplify the consequences of sexual risk.

Concurrent relationships and social and sexual mixing (including age, ethnicity and location) have been identified as important in understanding the transmission dynamics of STIs (Morris and Kretzchmar, 1997). Given the reported high levels of sexual activity within, often multi-national crews, and the fact that many cruise seafarers are involved in long-term relationships with shore-based partners, non-treatment of an STI may have significant implications for disease spread. It is important that cruise companies take steps to reduce sexual risk behaviour. Current efforts regarding educating about the risks associated with commercial sex should be

continued. Pre-embarkation and on board health education campaigns should draw attention to the potential risks associated with private sexual relationships that occur on board and advocate the use of condoms in such relationships. Condoms should be made available to both male and female seafarers in discreet locations on board. Contraceptives should also be made available through the ship's doctor. These steps that have relatively low cost to employers would have important benefits not only to the health of seafarers, but also their partners ashore.

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