Beach Week

A High School Graduation Rite of Passage for Sun, Sand, Suds, and Sex

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Background: Every year, thousands of suburban high school graduates from mid Atlantic states flock to nearby coastal beaches for a long-anticipated rite of passage known as “beach week.” Sand, sun, and sea, and also smoking, binge drinking, drugs, and sex, are reported to be dominant themes.

Objective: To document risk-taking behaviors by girls during beach week.

Method: Fifty-nine female suburban high school graduates who attended beach week in 1996 volunteered to fill out a confidential printed survey. Twenty-five girls (42%) completed the survey during a typical beach week party. Their activities were verified on site by a peer, recommended by her grade advisor for her integrity and popularity. Breath alcohol values were obtained at entry and departure from the party. The remaining 34 girls completed the supervised survey 2 to 3 months later.

Results: Daily cigarette smoking (54%), daily drunkenness (75%), and sex (46%) were the norm among respondents of our survey. Few reported first-time sex (n=4) or drug use (n=2). Abstinence from drugs (67%) and sex (55%) was not unusual but only 12% abstained from getting drunk. Sixteen girls (64%) reported that they drank 8 or more beers/wine during a typical beach week party. By departure from the party, 15 girls had breath alcohol values of 0.017 mmol/L or greater (reference range, <21.7 mmol/L), and 8 additional girls had breath alcohol values of 0.01 mmol/L to 0.015 mmol/L. Fifteen percent of the 59 reported injuries or illness were related to alcohol or drugs.

Conclusion: Most respondents enjoyed beach week but a large percentage engaged in serious risk-taking behaviors.


Editor’s Note: Unfortunately, most of us will not be surprised by the finding in this study. What needs to be added to the sun, suds, and sex is SANITY.

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In ATLANTIC coastal states from Delaware to South Carolina, the 3-week period after high school graduation is known as “beach week.” An annual “must do” rite of passage for approximately half of all suburban middle-class graduates, beach week resembles college students’ well-publicized, spring break pilgrimages to Florida.\textsuperscript{1}\textsuperscript{1} Beach week is symbolic of the completion of high school and the beginning of college or employment, the imminent separation from childhood friends, and departure for college. The objective is carefree revelry—carousing, sun, sand, and frequently, alcohol, other drugs, and sex. Groups of friends from the same high school often rent a room at a local beach resort motel or rooming house. A substantial deposit is usually required when the rooming house lease is signed. Popular beach week sites include Bethany Beach, Dewey Beach, Ocean City, Rehoboth Beach, Virginia Beach, and the Outer Banks of North Carolina. Beach week is eagerly anticipated by high school seniors for months prior to the event. Most students attend with a group of close friends, with parental permission and often with parental funding.

According to anecdotal and newspaper articles about beach week, binge drinking is the norm and drinking games are popular. The goal of drinking games seems to be to get drunk as quickly as possible and to “party,” with little concern about consequences. Recently, a new diversion, body piercing, has become popular during the beach week festivities.
SUBJECTS, MATERIALS, AND METHODS

STUDY DESIGN AND POPULATION

The 33-item survey was given to 59 white girls at 1 of 3 settings: On the fourth to sixth day of beach week at a North Carolina beach resort in June 1996 (25 of 59 subjects), during the month following beach week in their home community in Fairfax County, Virginia, in August 1996 (11 of 59 subjects), and outside a university dormitory in October 1996 (23 of 59 subjects). These locations were chosen because the study assistant spent time in each place and the participants knew and trusted her. Four girls refused to participate in the study. Each participant received $7 for her help. All respondents were graduated from high school in 1996 and had gone to beach week soon after graduation. The survey questions were based on personal interviews with 10 beach week participants. It included questions about cigarette smoking, drinking, drug abuse, and sexual intercourse prior to and during beach week. We included a multipart question containing Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) criteria for posttraumatic stress disorder to help us detect anyone suffering from this condition due to shameful or frightening experiences that might have occurred during beach week.

Before being administered, the survey instrument was reviewed by 10 experts in adolescent medicine, bioethics, and biostatistics. The questions were modified according to the reviewers’ suggestions and tested by 8 female high school seniors who were not study participants. Finally, the survey was reviewed for content and appropriateness by a committee of teachers of family medicine at Fairfax Family Practice, Fairfax, Va. Institutional Review Board permission was not obtained, but we exercised care by consulting 3 experts in adolescent bioethics prior to the start of the project. A consent form detailing the purpose of the study, a promise of confidentiality, the right to refuse to participate, the right to skip any question(s) that produced anxiety or discomfort, and the right to immediately stop answering questions if strong negative feelings occurred, was read and signed by each participant.

The survey was administered and supervised by a 1996 high school graduate who had been selected for her integrity and cheerful personality by her grade advisor. This individual had helped us with another project and was trustworthy and efficient. The beach parties were not staged for our study and the study assistant is certain that the quantity of alcohol consumed was representative of previous parties held during beach week. Breath alcohol values were obtained both at entry to several parties on different days and just before departure from the parties. A recently calibrated breath alcohol instrument (Alco-Sensor, Intoxicometers, St Louis, Mo) was used to obtain breath alcohol values. The research assistant was trained in its use by police instructors. Survey respondents were asked to voluntarily complete the anonymous questionnaire in private, place it in an unmarked envelope, and deposit it in a ballot box. Participants were given the address and telephone number of a physician from their practice and a local crisis intervention center, should they become anxious or depressed as a result of answering the survey.

How important a role do alcohol, other drug use, and sex play in a typical beach week experience? This descriptive survey study from the perspective of middle-class, suburban, college-bound girls, describes events during a typical beach week in 1996.

RESULTS

Fifty-nine girls completed the survey. 25 during beach week festivities. Our research assistant was trusted by her peers and by us because she was highly recommended by her grade advisor, had a reputation for honesty and reliability, and had successfully assisted one of us (R.H.S.) in a published study on high school drinking parties. Table 1 displays the demographic data for the participants. Their median high school grade point average was B, 16 (27%) were A students. The average cost of beach week was $300, derived from job earnings (26/59, 44%), parents (22/59, 37%), or personal savings (10/59, 17%). Parental permission to attend beach week was given for 54 (92%) of the respondents. Three girls described a "real battle" before they received parental consent. Many respondents had purchased articles in anticipation of beach week. Sunscreen lotion had been purchased by 44 girls (75%), 16 (27%) took oral contraceptive pills with them, 10 (17%) packed male condoms, and 11 (19%) purchased tear gas (Mace) spray as protection against assault. Eighty-six percent (51/59) remained at a beach week resort for 5 or more days. Almost half (49%) of the living arrangements were coeducational. A median of 75% of the respondents’ best friends attended beach week in 1996.

USE OF CIGARETTES, ALCOHOL, AND OTHER DRUGS BEFORE AND DURING BEACH WEEK

Prior to beach week, 13 (23%) of the 59 respondents were daily smokers (defined as smoking at least 5 cigarettes a day) (Table 2). This doubled during beach week, when 31 (54%) of the 59 respondents smoked at least 5 cigarettes a day (P<0.009, 2×2-table using Fisher exact test). Daily drunkenness was common during beach week (44 [75%]), none of the girls became drunk for the first time during beach week (Table 2). Breathalyzer values were obtained from all 25 girls who completed the survey during beach week. At entry to a typical beach week party, 19 girls had a breath alcohol level of 0 or 0.002 mmol/L; only 2 had a value in excess of 0.006 mmol/L. Prior to departure from the party, 15 girls (60% of 25 who attended) had a breath alcohol value of 0.017 mmol/L or greater, and an additional 8 girls had breath alcohol values of 0.01 to 0.015 mmol/L which is equivalent to drinking 3 or 4 beers in the hour prior to breath analysis. One girl had 0.008 mmol/L and the remaining girl had 0 mmol/L.

Drug use was less common; the most frequently used drug was marijuana (Table 2). Two girls smoked marijuana once or twice for the first time during beach week.
Comparing before and during beach week drug use for the 16 girls who reported that they were high on drugs more than 10 times before beach week, 5 reported no drug use during their beach week and 3 (19%) (all with grade point averages >3.5) got high more than 10 times during beach week. Eight girls (14%) smoked marijuana almost every day during beach week. Fifteen percent of respondents (9/59) stated that medical attention was necessary for themselves or a close friend because of injuries or medical problems while they were drunk or high during beach week.

**SEXUAL ACTIVITY**

Prior to beach week, 37 girls (63%) had sexual intercourse; 17 (46%) of these 37 girls reported 2 or more sexual partners (Table 3). During beach week, 27 girls (46%) reported that they had sex, 4 of them for the first time. The sexual experience was positive for 24 girls (86% of 27 girls who had sex during beach week). Sixty percent of their sexual partners were steady boyfriends, including the boyfriends of 3 of 4 girls who had been virgins before beach week. Eighty-six percent of the girls who had sex were drunk. None of the respondents admitted to being raped, and none met DSM-IV criteria for posttraumatic stress disorder.

**AFTERMATH OF BEACH WEEK**

Eleven (32%) of the 34 respondents who completed the survey months after the conclusion of beach week claimed to have persistent negative feelings. Four respondents (12%) felt a sense of worthlessness and/or depression, 6 (18%) were concerned about getting a bad reputation among high school classmates, and 5 (15%) were concerned about the possibility of being pregnant. We do not know if beach week was the start of nicotine addiction for any of the 18 girls who smoked cigarettes every day of their beach week vacation.

**REACTIONS TO SURVEY**

Fifty-two respondents (88%) stated that the survey did not upset them, 5 (8%) were slightly upset, and 2 (3%) were moderately upset when they completed the survey. No one was very upset or extremely upset by the survey, and none of the girls who completed the survey after their return from beach week contacted anyone for counseling.

**COMMENT**

Questionnaire surveys must be well designed and reviewed by experts in the field, and participants must be carefully selected to reduce the element of bias. We originally intended to administer all the surveys during beach week.
Adolescent girls already involved in high-risk behaviors were likely to continue or magnify these during beach week. Beach week is usually the first time these teenagers are away from home with large numbers of peers and unsupervised by adults. High-risk behaviors are not only socially acceptable, but also expected. It is likely that these high-risk behaviors will continue at college parties. Several important key findings emerge from an analysis of our beach week survey results. First, binge drinking, drunkenness, daily cigarette smoking, and illicit drug use seem to be epidemic during beach week; however, 47% (28/59) of these respondents did not smoke at least one four of a pack of cigarettes per day, 67% (40/59) did not take drugs, 55% (32/59) did not have sexual intercourse, and 12% (7/59) go drunk never or once. Second, girls tended to drink more alcohol during beach week parties than they did during parties held in their home community. There was a clear relationship between frequency and extent of alcohol intake and sexual intercourse among our survey respondents. Almost 50% of our 59 respondents engaged in sexual intercourse. Many of these sexually active girls reported that they used barrier protection each time. None of the respondents was forced to have sex against her will and none met DSM-IV criteria for posttraumatic stress disorder after beach week. Finally, few girls initiated sex or drugs during beach week.

Given this snapshot of experiences during beach week 1996, what should physicians counsel adolescent patients and their parents? First, parents must know that many teens will get repeatedly drunk during beach week and that there is a real risk that they or a close friend will get hurt as a result of intoxication. In Dewey Beach alone, there were 300 rescue squad calls for medical problems and trauma in teenagers during beach week in 1995. Alternatives to beach week, such as a chaperoned, week-long class trips to theme parks or other recreational parks, are worth considering, as they have been proven successful. The following suggestions have not been evaluated for true efficacy but they seem practical: the teen does attend beach week, 1 responsible parent for every 10 teens should attend and stay close by at a separate location; reasonable curfews (eg, 1 AM), should be imposed by the chaperone and by beach town ordinances; a daily visual check-in with the chaperone should be obligatory to detect illness or injury; and beach week attendees should call home at least every second or third day. Finally, beach week participants should be better prepared. They should bring medical insurance information with them. Teens younger than 18 years should have a signed parental permission for emergency treatment. Along with sunscreen with a sun protective factor of 15 or greater and insect repellent for biting sand fleas, sexually active girls should bring birth control pills and male condoms, and have the resolve to use them.

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