

Knowledge of and attitudes towards family planning and early detection of breast and cervical cancer in two female populations in Greece

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Women's attitudes towards contraception and abortion, as well as the use of preventive methods, such as breast self-examination and the Papanicolaou smear test, significantly influence the health status of the female population^{1,2}. In Greece, few epidemiological studies have been carried out in this field, despite known dangers from the high frequency of abortions and the incomplete knowledge about and use of preventive methods^{3,4}.

Studies of aspects of women's health were carried out within the framework of two surveys of morbidity and health services utilization, in two populations, characterized by different socioeconomic and educational levels. Questions concerning the current use of contraception, induced abortion, knowledge of breast self-examination, and practice of the Papanicolaou smear test, were added in the main questionnaire, as a particular section of the interview, and were addressed to all women aged 17–54, who were included in the sample.

The first health survey was conducted among the workers of a shipyard, for the planning of a health promotion program at the work-site⁵. The second one was conducted among the inhabitants of a municipality near Athens, for the planning of the local Health Centre⁶. In this paper the results for the questions concerning women's health are reported for these two different populations. Similar trends, as well as important differences between the two groups, are described.

Materials and Methods

The studies were carried out within the framework of two health surveys carried out in two populations. The first was conducted from October until December 1987 among workers of a shipyard in the area of Athens, with about 3500 employees (population I). The second was carried out from February until May 1988 in a municipality near Athens, with about 25000 inhabitants (population II).

In the first survey, all women aged between 17–54 working in the shipyard were included in the sample (99 women in all). Of those, 91 responded and were interviewed (participation rate 92%).

In the second survey, a random household sample was selected within a substratum by sections of the municipality, as divided by the National Statistical Service. Sampling was selectively made amongst

sectors, depending on the total number of households included in each sector. All women of selected households aged 17–54 years were included in the sample. Thus, 110 women aged 17–54 were included in the sample and 105 of them responded and were interviewed (participation rate 95%).

Data were collected by a personal interview arranged for each respondent. Information was collected on socioeconomic characteristics, induced abortions, contraceptive use, practice of breast self-examination and Papanicolaou smear test.

The questionnaires addressed to both populations were identical. The objectivity of the questions was evaluated by comparison of results from different interviewers. The variation of results among different interviewers was checked by the χ^2 test. Questions presenting statistically significant differences among the interviewers were excluded from the data analysis.

The 95% confidence intervals (CIs) were computed using the "Documenta Geigy" statistical tables⁷.

Results

Table 1 shows the age distribution of the interviewed women. Table 2 shows the educational level of the two populations. The educational level is higher in population I than in population II.

Table 3 presents occupation in each population. The occupation status is different in the two populations; all of the women in population I are employees, whereas about three quarters of the women in population II are housewives. Married women represent 67% (61 individuals) of all interviewed women in population I and 80% (84 individuals) in population II.

The percentage of women aged 17–44 years who were not using any contraceptive method is shown in Table 4. A higher percentage of women of all ages of population II stated that they did not use any contraceptive method. The age-adjusted percentage is significantly higher in population II than in population I ($p < 0.001$).

The dominant types of contraceptive method used in both populations were coitus interruptus and the condom. All other contraceptive methods, such as IUDs and contraceptive pills, were used less frequently (Table 5).

Tab. 1. Age-distribution of the interviewed women.

Age	Population I			Population II		
	%	(N)	(95% CI)	%	(N)	(95% CI)
17–24	8.8	(8)	(4–17)	26.7	(28)	(18–36)
25–34	51.7	(47)	(40–62)	31.4	(33)	(22–41)
35–44	25.3	(23)	(16–35)	25.7	(27)	(17–35)
45–54	14.3	(13)	(7–23)	16.2	(17)	(10–25)
All ages	100.1	(91)		100.0	(105)	

Tab. 2. Years of education in the two studied populations.

Education	Population I			Population II		
	%	(N)	(95% CI)	%	(N)	(95% CI)
< 7 years	15.4	(14)	(8–24)	56.2	(59)	(45–65)
7–12 years	67.0	(61)	(49–70)	38.1	(40)	(35–55)
> 12 years	17.6	(16)	(12–30)	5.7	(6)	(2–11)
Total	100.0	(91)		100.0	(105)	

Tab. 3. Employment in the two studied populations.

Employment	Population I			Population II		
	%	(N)	(95% CI)	%	(N)	(95% CI)
Professional technical and related workers	7.7	(7)	(5–18)	4.8	(5)	(2–11)
Administrative and executive officials	2.2	(2)	(1–11)	0.0	(0)	(0–10)
Employees	74.7	(68)	(65–84)	5.7	(6)	(2–11)
Commerce and sale workers	1.1	(1)	(0–10)	5.7	(6)	(2–11)
Service workers	13.2	(12)	(8–24)	1.0	(1)	(0–10)
Workers	1.1	(1)	(0–10)	4.8	(5)	(2–11)
Housewives	0.0	(0)	(0–10)	76.1	(80)	(65–83)
Retarded individuals	0.0	(0)	(0–10)	1.9	(2)	(1–10)
Total	99.9	(91)		100.0	(105)	

Tab. 4. Women aged 17–44 who stated they use no contraceptive method.

Age	Population I			Population II		
	%	(N)	(95% CI)	%	(N)	(95% CI)
17–24	25.0	(2)	(3–65)	50.3	(14)	(31–69)
26–34	12.8	(6)	(3–23)	33.3	(11)	(18–52)
36–44	34.8	(8)	(16–57)	48.2	(13)	(29–68)
All ages	20.5	(16)	(12–29)	44.7	(38)	(34–55)
Age-adjusted*	24.3		(16–35)	46.0		(35–55)

* European Standard Population.

Tab. 5. Type of contraception used by woman aged 17–44.

Contraceptive method	Population I			Population II		
	%	(N)	(95% CI)	%	(N)	(95% CI)
Coitus interruptus	43.6	(34)	(34–56)	35.3	(30)	(25–46)
Condom	32.1	(25)	(21–41)	20.0	(17)	(12–30)
Contraceptive pill	3.8	(3)	(2–11)	1.2	(1)	(0–10)
IUD	1.3	(1)	(0–10)	2.4	(2)	(0–12)
Other methods	1.3	(1)	(0–10)	2.4	(2)	(0–12)

Tab. 6. Women aged 17–44 who had undergone at least one abortion.

Age	Population I			Population II		
	%	(N)	(95% CI)	%	(N)	(95% CI)
17–24	25.0	(2)	(3–65)	21.4	(6)	(25–46)
25–34	17.0	(8)	(6–28)	36.4	(12)	(20–55)
35–44	43.5	(10)	(23–65)	40.7	(11)	(22–61)
All ages	25.6	(20)	(16–35)	34.1	(29)	(24–44)
Age-adjusted*	28.6		(20–40)	39.0		(30–50)

* European Standard Population.

Tab. 7. Women aged 17–54 who underwent a smear Pap-test during the last year.

Age	Population I			Population II		
	%	(N)	(95% CI)	%	(N)	(95% CI)
17–24	0.0	(0)	(0–37)	10.7	(3)	(2–28)
25–34	31.9	(15)	(18–46)	36.4	(12)	(20–55)
35–44	34.8	(8)	(16–57)	44.4	(12)	(25–65)
45–54	30.8	(4)	(9–61)	23.5	(4)	(7–50)
All ages	29.0	(27)	(20–39)	30.1	(31)	(21–38)
Age-adjusted*	24.5		(16–35)	28.8		(20–37)

* European Standard Population.

The percentage of married women not using contraceptive method was 21.6% in population I and 36.8% in population II.

Table 6 shows the percentage of women aged 17–44 who had had at least one induced abortion in the past. In total, 25.6% of women in population I and 34.1% of women in population II stated that they had undergone at least one abortion. An important difference between the two populations arises in the age group 25–34. The age-adjusted percentage is higher in population II than in population I, but this difference is not statistically significant. Among married women aged 17–44 years, 25.5% in population I and 39.5% in population II stated that they had undergone an abortion. 12.8% of the women working at the shipyard and 20.1% of the

women living in the municipality in the Athens area mentioned more than one abortion (up to 8 abortions).

Women who had had a Papanicolaou smear test carried out in the last year are shown in Table 7. The percentages were almost the same in both populations. The frequency with which the Papanicolaou smear has been made was highest in the age group 35–44 years in both populations.

The practice of breast self-examination was known to 53.8% of women in population I and 44.8% of women in population II. The percentage was higher among young women. This was especially marked for population II, whereas in population I a relatively high percentage was noted even in the age group 45–54 (Table 8).

Tab. 8. Women aged 17–54 who knew the practice of breast self examination.

Age	Population I			Population II		
	%	(N)	(95% CI)	%	(N)	(95% CI)
17–24	37.5	(3)	(1–75)	50.0	(14)	(31–69)
25–34	63.8	(30)	(50–78)	45.5	(15)	(28–63)
35–44	39.1	(9)	(19–61)	44.4	(12)	(25–65)
45–54	53.8	(7)	(25–81)	35.3	(6)	(14–62)
All ages	53.8	(49)	(44–66)	44.8	(47)	(35–55)
Age-adjusted*	48.6			43.8		

* European Standard Population.

Discussion

The results of this study suggest that the two principal contraceptive methods used in both populations were coitus interruptus and the condom. This is the same for both unmarried and married women. These results are consistent with data provided in the Greek literature. Indeed, condoms and coitus interruptus seem to be the only significantly widespread contraceptive methods in Greece^{3,4,8}. There was a significant difference in the frequency of use of contraceptive methods in the two populations. A higher percentage of women of all ages working at the shipyard used some contraceptive method than did women living in the municipality near Athens area.

It should be noted that the socioeconomic characteristics differed in the two populations. The first population consisted of working women, most of whom (about 80%) were part of the executive and clerical staff of the shipyard. In contrast, a majority of women included in population II were housewives (about 75%). It should also be mentioned that the educational level is higher in population I than in population II. According to data from the literature, the use of contraceptive methods is significantly influenced by socioeconomic and educational parameters^{9,10,11}.

Both of the studied populations showed important differences in the use of contraceptive methods when compared with women in other European countries. In many of those countries a higher percentage of women of reproductive age use a contraceptive method. Furthermore, the use of more modern and effective methods, such as contraceptive pills and intra-uterine devices, is most frequent^{12,13}.

The frequency of abortions was high for both populations studied, and was found to be the same for unmarried and married women. According to data from other Greek and European studies, the frequency of abortions has been particularly high in Greece since the 1960s, and the trend persists today^{3,4,8,14,15,16}. The practice of abortion seems

to be considered in Greece as one of the most important methods of family planning^{4,17,18}. The fact that abortions are widely carried out in Greece as a family planning method may explain the finding in the present study that a significant number of women of both studied populations had undergone more than one abortion.

The frequency of Papanicolaou smear tests was comparable to that in other industrialized countries, for both populations studied^{19,20}. Young women, below 45 years old, seem to use the test frequently. This finding could be explained by a higher level of information and a greater interest in preventive medicine and female health among younger women. It is worth noting that, although the Papanicolaou smear test is carried out free of charge by public hospitals and health centres all around Greece, there are no national screening programs for secondary prevention of cancer of the cervix, as there are in other countries²¹.

The results of the present study indicate that a relatively small percentage of the women interviewed knew the practice of breast self-examination. This comment holds to a greater extent for women aged over 35, with the exception of the age group 46–54 in the case of women working at the shipyard. In this case too, younger women seemed to be better informed and to have a greater interest in preventive medicine, although we do not know whether the practice of self-examination by these women is systematic and effective.

It should be noted that breast cancer is the most common cause of death from cancer in the whole Greek female population²². The practice of breast self-examination is of significant importance in terms of early detection of breast cancer; knowledge of this preventive method, and attitudes towards it, are significantly influenced by social and educational factors^{23,24,25,26}.

The sample size, although representative for both studied populations, is relatively small and perhaps insufficient for drawing significant conclusions about differences between the two populations for

rare situations, such as the use of contraceptive pills or IUDs. The participation rate was high, so we do not expect any important selection bias in the findings of the study. The studied parameters do not present significant variations in the short-term, so that the interval of about six months between the two surveys would not be expected to influence them.

Although the small sample size puts some limitations on the interpretation of our data, the findings of the study indicate that there exist some similar trends characterizing both populations. These trends are the use of condoms and coitus interruptus as the most widespread contraceptive methods, as well as the use of induced abortions as a common method of family planning. In the two populations, about 30% of all interviewed women had had a Papanicolaou smear test carried out during the last year, and a relatively low percentage knew about self-examination of the breast.

There are also some important differences, probably due to the differences in socioeconomic and educational level between the two populations. These include the more frequent use of some contraceptive method, the less frequent use of abortions, and the more frequent knowledge of breast self-examination, in the population of women working at the shipyard.

The findings of the present study, as well as data from other Greek studies, suggest that there is a lack of information about contraception and early detection of breast and cervical cancer in broad sections of the Greek female population. Health education programs should be undertaken in order to change the attitudes of women towards these aspects of health care.

Summary

This paper presents the results of surveys of contraceptive use, the frequency of induced abortions, the use of the Papanicolaou smear test and knowledge about the practice of breast self-examination in two female populations, characterized by a different socioeconomic level. There exist similar trends, as well as some remarkable differences between the two populations. Both of these populations included a high proportion of women who had undergone at least one abortion. Withdrawal and condom use were the most common contraceptive methods. About one third of women of the two populations had had a smear Pap-test carried out during the last year. 53.8% of the women in the population I and a 44.8% of the population II stated that they know how to practice breast self-examination.

Résumé

Connaissances et attitudes à l'égard du planning familial et de la détection précoce des cancers du sein et du col utérin dans deux populations féminines grecques

Cet article présente l'usage de méthodes contraceptives, la fréquence de l'interruption volontaire de la grossesse, la pratique du frottis cervical et la connaissance de l'autopalpation mammaire dans deux populations féminines grecques, caractérisées par un niveau socioéconomique différent. Nous avons constaté des tendances communes, ainsi que certaines différences remarquables. Les deux populations présentent une fréquence élevée d'IVG. Le coitus interruptus et le préservatif masculin sont les méthodes contraceptives les plus répandues. Une femme sur trois avait pratiqué le frottis cervical pendant l'année précédente. Le pourcentage des femmes qui connaissaient la pratique de l'autopalpation mammaire allait de 44.8% à 53.8% dans les deux populations.

Zusammenfassung

Wissen und Einstellung zur Familienplanung und zur Früherkennung von Brust- und Zervixkarzinom in zwei Populationen von Frauen in Griechenland

In diesem Artikel wird die Benutzung von Kontrazeptionsmethoden, die Häufigkeit der Abtreibungen, die Durchführung des Papanicolaou-Tests, sowie die Kenntnis der Brust-Selbstuntersuchungsmethode, unter zwei griechischen, weiblichen Bevölkerungsgruppen, aus unterschiedlichen sozialen Schichten, dargestellt. Es werden gemeinsame Tendenzen, sowie einige bemerkenswerte Unterschiede beschrieben. Coitus interruptus und die Condombenutzung sind die geläufigsten Kontrazeptionsmethoden. Nur bei einer von drei Frauen wurde ein Pap-Test im Laufe des letzten Jahres durchgeführt. Der Prozentsatz der Frauen, die die Brust-Selbstuntersuchung können, betrug 44.8% in der einen und 53.8% in der anderen Gruppe.

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