A B S T R A C T

We sought to understand the subjective reports of women's health concerns. A randomly dialled telephone survey was conducted resulting in a sample of 458 women (Caucasian/European = 302, Native/Aboriginal = 81, Black = 75), aged 18-81. Women were asked in an open-ended format to list their three top health concerns for themselves and then for Canadian women. Responses were recorded verbatim and categorized into one of nine mutually exclusive health concern categories. The three main health concerns for Canadian women were: Psychosocial Issues, Other Specific Illnesses, and Cancer. The three most important personal health concerns were Psychosocial Issues, Other Specific Illnesses, and Heart and Related Diseases. Few ethnic differences were noted. Results suggest that it is important to recognize and attempt to alleviate health concerns about stress and depression, which are not usually considered as being major health problems by health care professionals.

A B R É G É

Nous avons étudié les comptes rendus subjectifs de femmes au sujet de leurs préoccupations de santé en menant un sondage téléphonique au hasard auprès d'un échantillon de 458 femmes (302 blanches/européennes, 81 autochtones, 75 noires) de 18 à 81 ans. Nous leur avons demandé d'énumérer librement les trois questions de santé qui primaient dans leur vie et pour l'ensemble des Canadiennes. Leurs réponses ont été notées mot pour mot et classées en neuf catégories mutuellement exclusives. Les trois principales catégories de questions de santé touchant l'ensemble des Canadiennes étaient les Problèmes psychosociaux, les Autres maladies et le Cancer. Les trois principales catégories touchant directement les femmes interrogées étaient les Problèmes psychosociaux, les Autres maladies et les Maladies du cœur. Nous avons constaté peu de différences d'ordre ethnique. Les résultats soulignent l'importance de reconnaître et d'essayer de soulager les préoccupations à l'égard du stress et de la dépression, que les professionnels de la santé ne considèrent pas d'habitude comme de graves problèmes de santé.

Three Top Canadian and Personal Health Concerns of a Random Sample of Nova Scotian Women

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Although women's health issues are receiving more attention, women's own perceptions of their health needs have received little attention.¹⁻³ Instead of consulting women, many studies evaluating women's health care needs have relied upon opinions of health provider experts or ideas from leaders of various women's groups. The possibility that women have health concerns other than those emphasized by the health professional community has been suggested,⁴ but not studied extensively. Direct contact with women themselves is necessary to ascertain whether their health priorities and concerns are similar to those posited by health provider experts.

Previous studies have in part addressed this issue. Australian² and Canadian researchers^{1,3} have surveyed women within their respective countries. They found inconsistencies between health problems spontaneously mentioned by women and those highlighted within health provider communities. For example, Redman et al.² examined perceptions of women's health needs in a community sample of 129 randomly selected adult women. The respondents were asked to prioritize the problems that affected them personally and Australian women in general (i.e., "What

do you think are the three most important health or social problems facing women in Australia?"). For women personally, the main problems were obesity (16.4%), stress (16.4%), and financial problems (14.8%). For Australian women in general, the perceived health concerns were breast cancer (15.6%), stress (14.1%), use of tranquilizer drugs (13.3%), cancers other than those of the breast or cervix (11.7%), and physical violence (11.7%).

Walters^{1,3} conducted a similar study of Canadian women's perceptions of their health problems, with a randomly selected, Hamilton resident, sample of 356 adult women using similar questions to those used in the Australian study. The results from Walters' research suggest that the most common personal and Canadian women health problems were mental health problems, particularly stress.

The need to assess women's subjective health concerns is great, as health resources are scarce and thus needs-based planning for health research and health care allocation is critical. Although Walters^{1,3} examined the perceptions of general and personal health concerns among Canadian women, her sample was comprised of urban, Hamilton, Ontario residents only.

We were interested in obtaining spontaneous reports of the three most important health concerns of a population-based sample of women from three different ethnicities – Caucasian/European, Black, and Native/Aboriginal – so that their perceptions of their important health concerns could be considered. Therefore, we asked a random, population-based sample of women about their own major health concerns and about their perceptions of health concerns for Canadian women in general.

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METHOD

Sample design and selection

The sample for each ethnic group was drawn using systematic sampling procedures from a list of randomly selected Nova Scotian households compiled from all listed provincial telephone numbers, drawn from a provincial database that is updated quarterly. Samples were selected to match the geographical distribution of the population derived from Statistics Canada 1996 Census profiles. The first sample frame comprised a province-wide random probability sample of 300 women stratified across the province's 18 counties. The remaining two sample sets were designed to target specific communities in Nova Scotia with the highest incidence of Native/Aboriginal and Black women. The sample of Native/Aboriginal women was drawn from Nova Scotia reservation communities as defined by Statistics Canada proportionate to population. The incidence of Native/Aboriginal women in these communities ranged from 69 to 99%. The sampling frame for Black women was based on census divisions with an incidence of Black population over 3%.

Procedure

A telephone survey lasting approximately 20 minutes was conducted by a research company affiliated with the provincial telephone utility. Telephone interviewers went through three hours of training and were then supervised for interview quality throughout the survey. Phone calls were placed during the day and evening hours so that working women and women who worked at home could be included. Up to five callbacks were placed if there was no answer. First, the interviewer identified herself and asked to speak with a woman who lives in the household who is 18 years of age or older. Consent was obtained, and if participants were over 18 and of one of our ethnic groups of interest, they were asked to identify what they "think are the three most important health problems or concerns facing women in Canada today?" and "What are the three most important health-related problems or concerns for you?"^{1,3} Participants were not asked to rank or respond to options, but were simply

TABLE I
Demographic Characteristics of Survey Participants

Demographic Variable	Caucasian/European	Ethnicity Native/Aboriginal	Black
Age	45.4 (14.7)	37.7 (12.7)*	45.5(15.7)
Marital Status			
Never married	9.7 (%)*	34.6 (%)	30.6 (%)
Married/common-law	74.2*	40.7	43.1
Divorced/widowed	11.7	16.0	15.3
Education			
≤ High School	42.6 (%)	59.2 (%)	57.0 (%)
Trade/tech./other school	26.4	4.8	15.3
Some university	8.0	16.0	15.3
≥ Graduated university	23.1	19.7	12.5
Household Income			
< \$20,000	22.7 (%)	39.5 (%)	26.4 (%)
\$20,000-\$49,999	39.8	17.3	40.3
≥ \$50,000	22.7*	7.4	9.7

Note: Group ages are reported as $\bar{X}$ (SD). * = $p < 0.05$.

asked to respond to these open-ended questions. All responses were recorded verbatim. A primary coder placed each response (three per respondent) into one of nine mutually exclusive categories. We developed the nine categories from Walters^{1,3} reports, as well as two pilot tests of our procedure.* A second coder did a reliability check of the category placement on a random 10% of the answers.

Participants

The final sample was comprised of 302 Caucasian/European, 75 Black, and 81 Native/Aboriginal women. Refusal rates were similar for the three groups (35%, 31% and 34%, respectively).

Statistical analyses and data entry

Descriptive statistics were calculated for demographic variables and the health concern categories. One-way ANOVAs were employed to test for demographic differences among the three ethnic groups. Pearson Chi-square tests of goodness of fit were conducted⁵ to test for differences in the number of times a health concern was mentioned as a top three concern for Canadian women versus for the women themselves. Pearson Chi-square tests were also used to test for health concern propor-

tion differences among the three ethnic subgroups. As we conducted 30 independent Chi-square tests, we chose to use a Bonferroni family-wise correction to our alpha level, resulting in an associated p level less than 0.002 with one degree of freedom for the test to be considered significantly different. Data was double-entered to control for entry mistakes.

RESULTS

The demographics of our sample are provided in Table I. Our sample was on average 44 years old, with a range from 18 to 81 years. As can be seen, the Native/Aboriginal group was significantly younger than the other two groups and the Caucasian/European group was significantly more likely to be married and have a higher household income than the other two groups. No other demographic differences were noted.

There was a 96% agreement between the primary and reliability coders about the placement of the answers into the nine categories, which we considered acceptable coder reliability. We therefore analyzed the primary coders' category placement.

For all women combined, the three main health concern categories mentioned for Canadian women were: 1) Psychosocial Issues (e.g., stress, depression, anxiety, mental health and socio-cultural stress), 2) Other Specific Illnesses (e.g., diabetes, arthritis, flu, osteoporosis, migraine headaches, STD, and asthma), and 3) Cancer (all types of cancer, excluding breast cancer). When these same women

* Initial pilot testing of the survey was performed in Alabama, USA and in Nova Scotia, Canada, with women ranging in age from 18 to 70. The purpose of the pilot study was to discover any semantic problems in, and assess the readability of, the survey. Following the pilot testing period, representatives from Corporatel Research Associates were hired to perform the telephone interviews and record the responses to queries.

TABLE II
Top Health Concerns for Canadian Women

Health Concerns	Canadian Women in General %	N	Women Personally %	N
All Respondents (N=458)				
Psychosocial Issues	22.0A	101	37.0 ^A	169
Other Specific Illnesses	18.0B	82	28.0 ^B	128
Cancer	17.0	78	13.0	59
Heart and Related Diseases	14.0	64	17.0	78
Breast Cancer	13.0C	59	0.4 ^C	02
Caucasian/European (N=302)				
Psychosocial Issues	29.9	90	30.9	93
Heart and Related Diseases	16.2	49	17.6	53
Cancer	16.2	49	16.7	50
Breast Cancer	15.5	47	05.9	18
Other Specific Illnesses	8.9	27	22.1 ^D	67
Native/Aboriginal (N=81)				
Psychosocial Issues	25.8	21	18.1	15
Cancer	15.7	13	13.4	11
Other Specific Illnesses	13.1	11	43.0 ^D	35
Breast Cancer	11.6	09	06.0	05
Other	10.1	08	01.4	01
Black Women (N=75)				
Other Specific Illnesses	17.9	13	32.5	24
Psychosocial Issues	16.4	12	26.8	20
Breast Cancer	16.4	12	07.3	05
Cancer	13.5	10	13.8	10
Other	10.6	08	03.3	02
Heart and Related Diseases	10.1	08	14.6	11

Note: Percentages with the same superscripted letter are significantly different at the 0.002 level.

were questioned about their most important *personal* health concerns, they mentioned Psychosocial Issues, Other Specific Illnesses, and Heart and Related Diseases most frequently (see Table II). Given the top three health concerns differed among the ethnic subgroups of our sample, we have chosen to display the top five health concerns, so that comparison among the different subgroups can be made.

First, we examined differences between the top three health concerns for Canadian women and the top three personal health concerns, represented by all of the women in our sample (the top half of Table II). As can be seen, all respondents reported Psychosocial Issues as a more important health concern for themselves than for Canadian women in general ($\chi^2(1) = 2.6, p < 0.002$). Similarly, they mentioned Other Specific Illnesses more frequently for themselves personally than for Canadian women ($\chi^2(1) = 13.1, p < 0.002$). Finally, they reported that Breast Cancer was more of a health concern for Canadian women than for themselves personally ($\chi^2(1) = 36.3, p < 0.002$).

Our research data also permitted us to look at similarities and differences between Native/Aboriginal, Black and Caucasian/European women. Of all possible differences tested, only one reached sta-

tistical significance: Native/Aboriginal women were significantly more likely to report Other Specific Illnesses as a top health concern for themselves personally than were Caucasian/European women ($\chi^2(1) = 14.3, p < 0.002$). All other comparisons were not statistically significant.

DISCUSSION

The findings of this study are consistent with prior research. The women in Walters' study cited Cancer, Stress, Breast Cancer, and Heart Disease themes as the main health problems facing Canadian women – similar to those themes reported by our sample. Further, in both Walters' studies^{1,3} and our current study, women mentioned Psychosocial Issues (such as stress, depression, and obesity) frequently. However, while Psychosocial Issues were listed first as the Canadian and personal health concern in our study, these factors are much less frequently addressed by medical or health research. The fact that stress, anxiety, depression, and other mental health issues are top Canadian and personal health concerns merits further attention from health professionals. For instance, better understanding of how stress affects the quality of women's lives would parallel the emphasis that women have placed

upon this particular phenomenon. Also, health promotion recommendations that decrease stress and other related factors should be adopted.

It is not surprising that women mentioned Other Specific Illnesses more often as a concern for themselves than for the average Canadian woman. We all have specific health complaints that may be rare relative to others in the population, but are nonetheless considered a personal health concern.

More surprising, however, is the finding that Breast Cancer is listed significantly more often for Canadian women than it is as a personal health concern. This may be attributed to the highly publicized national campaigns promoting cancer awareness, such as Cancer Awareness month, National Cancer Survivors Day, and Breast Cancer Awareness month. (Note that our study did not occur during any of these awareness campaigns, so it is unlikely that these campaigns artificially increased the reports that we received that breast cancer was a health concern.) Through such campaigns women may be becoming increasingly aware of the fact that breast cancer is the most frequently diagnosed cancer in Canadian women,⁶ and that 1 in 9 women is expected to develop cancer in her lifetime, and 1 out of every 25 is expected to die from it.^{6,7} So although it may not be a personal concern at the moment, women appear to be aware of the high prevalence of this disease.

Finally, we note few ethnic differences in the reported health concerns. Of the 30 possible differences, only Native/Aboriginal and Caucasian/European women differed significantly with respect to mentioning Other Specific Illnesses as a top health concern. We can speculate from data collected in other studies⁹⁻¹² that the Native/Aboriginal sample, although significantly younger than the Caucasian/European sample, may already be experiencing a number of specific illnesses that are determining their reporting of these problems. For example, there is evidence to suggest that due to living conditions, low socio-economic status and rates of sexual abuse, Native/Aboriginal women suffer higher rates of STDs than non-Aboriginal women.^{10,12} We also know that diabetes is

widely prevalent in Canada's Native/Aboriginal population, with a rate three times the national average, and complications from diabetes occur more frequently and at earlier ages among Native/Aboriginal populations.^{9,11}

There are some limitations to our study that should be noted. First, we had a number of issues that compromise the generalizability of our study: 1) our refusal rate (around 35%), 2) the use of listed telephone numbers, 3) the use of Nova Scotian women. Second, we chose to use an open-ended question format, but offering possible categories instead might have altered the percentages reported by our sample for various health concerns. Finally, we ended up with nine health concern categories, based on the categorization from our pilot studies and from the work of others.¹⁻³ While this level of grouping was reasonable for comparing ethnic groups, smaller categorizations might have led to the identification of very specific areas where ethnic or other differences lay. However, some initial attempts to create smaller categories did not lead to acceptable coder agreement levels.

Findings drawn from lay perspectives should be compared to those from more traditionally favoured methodologies. If a discrepancy exists between the priorities identified by women and those identified by the health provider community, then the consequences may be diminished compliance with prescribed health provider interventions, reluctance to seek traditional treatment, and an increase in the use of alternative medicine approaches by women. Research that focusses on women's health concerns about their psychosocial well-being, and how these factors in turn affect their physical health, appear particularly warranted by these findings.

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2001 National Nutrition Month Campaign *Making Sense of the Food You Eat...link to dietitians.ca*

GENERAL NUTRITION MONTH INFORMATION

Dietitians of Canada is the national voice of dietitians, working to achieve health through food and nutrition. It represents more than 5,000 dietitians across Canada and is the third largest dietetic association in the world. Dietitians are the ideal source of reliable food and nutrition advice.

Nutrition Month takes place throughout the month of March each year since the early 1980s. It is a call to action that focusses on achieving a positive lifestyle and providing healthy eating messages based on sound science.

Nutrition Month is designed as an opportunity for consumers to take time to become more aware of nutrition and to take action. This year's campaign acknowledges that Canadians are more knowledgeable about nutrition but are still confused by many myths and misconceptions. Dietitians across Canada are joining together to provide Canadians with reliable, accurate nutrition information that will help them make sound, informed choices.

During Nutrition Month, dietitians will show Canadians how to eat well through a series of nutrition-related initiatives. Information on community events can be obtained by visiting the nutrition month website: www.dietitians.ca/eatwell or by contacting a dietitian at a local public health department or hospital.

National Nutrition Month 2001 is organized by Dietitians of Canada and is sponsored by the Canadian Egg Marketing Agency, Dairy Bureau of Canada, Kraft Canada Inc., Chatelaine and CHUM Radio Group.

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