



Consistency among participants in a breast cancer follow-up study

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ABSTRACT

The New Mexico Women's Health (NMWHS) Study: Long-term Quality of Life (LTQOL) is a follow-up of women who previously participated in a population-based, case-control breast cancer study of Hispanic and non-Hispanic white women conducted between 1992 and 1996. Cases were obtained from the New Mexico Tumor Registry (1992-1994). Controls were residents of New Mexico and matched on ethnicity, age-group and health planning district. A total of 100 women who completed the follow-up questionnaire were randomly selected from 430 subjects and asked to respond to selected questions one year later. Only one subject reported a different date of birth and there were no differences for height at age 65. However, 36% of women reported a different height at age 18, and 17% reported differently about their use of hormone replacement therapy. Only a small fraction of women reported a different answer when asked about their diagnosis of diabetes (3%), mother's diagnosis of breast cancer (2%), and colon cancer (4%), family history of cancer other than breast cancer (5%) and smoking (5%). However, on average, a higher percentage of women reported differently when asked about their sister's (breast: 30%, colon: 27%) and daughter's (breast: 33%, colon: 32%) cancer diagnoses. When stratified, greater inconsistency was observed among controls (64%) than cases (36%) and among non-Hispanic white (70%) women than among Hispanic (30%) women. When results of QC and LTQOL were compared to NMWHS data, 1% and 9% women were inconsistent in reporting their ethnicity and smoking history respectively. These preliminary results suggest that overall women were consistent in their answers except when asked to recall events from the remote past. To further investigate these preliminary findings, reliability tests will be conducted.

STUDY OBJECTIVES

- (a) Test the consistency of response to questions among women who participated in a breast cancer follow-up study.
- (b) Test if consistency of response varied by case-control status and ethnicity.

STUDY POPULATION AND ANALYSIS

- ❖ NMWHS is a population-based, case-control breast cancer study of Hispanic and non-Hispanic white women conducted between 1992 and 1996.
- ❖ LTQOL study is a 13-15 years follow-up of women who previously participated NMWHS study.
- ❖ Out of the 1556 (cases: 712 (45.8%) and controls: 844 (54.2%)) subjects enrolled during baseline, a total of 429 subjects participated in the LTQOL telephone interview.
- ❖ One year following the LTQOL interview 100 women were randomly selected to participate in a QC interview.
- ❖ Frequency analysis was conducted to compare the distribution of responses during baseline and follow-up interviews and during LTQOL and QC interview.

RESULTS

Table 1 Comparison between responses: NMWHS and LTQOL follow-up interviews

Questions	Difference in Response	Response freq (%) (n= 429)	Case Vs Control		Ethnicity	
			Case (%) (n= 177)	Control (%) (n= 252)	Hispanic (%) (n= 141)	Non-Hispanic White (%) (n= 288)
Have you smoked at least 100 cigarettes in your entire life?	No Difference	402 (94)	166 (94)	236 (94)	127 (90)	275 (95)
	Difference	27 (6)	11 (6)	16 (6)	14 (10)	13 (5)
Subject's Ethnicity	No Difference	420 (98)	176 (99)	244 (97)	-	-
	Difference	9 (2)	1 (1)	8 (3)	-	-
Father's ethnicity	No Difference	397 (93)	166 (94)	231 (92)	125 (89)	272 (94)
	Difference	32 (7)	11 (6)	21 (8)	16 (11)	16 (6)
Father's birthplace	No Difference	369 (86)	155 (88)	214 (85)	122 (87)	247 (86)
	Difference	60 (14)	22 (12)	38 (15)	19 (13)	41 (14)
Mother's ethnicity	No Difference	409 (95)	171 (97)	238 (94)	132 (94)	277 (96)
	Difference	20 (5)	6 (3)	14 (6)	9 (6)	11 (4)
Mother's birthplace	No Difference	380 (89)	159 (90)	221 (88)	127 (90)	253 (88)
	Difference	49 (11)	18 (10)	31 (12)	14 (10)	35 (12)
What language do/did you usually use with your parents?	No Difference	283 (66)	114 (64)	169 (67)	76 (54)	207 (72)
	Difference	146 (34)	63 (36)	83 (33)	65 (46)	81 (28)

RESULTS

Table 2 Comparison between responses: LTQOL and QC interview

Questions	Difference in Response	Response freq (%)	Case Vs Control		Ethnicity	
			Case (%)	Control (%)	Hispanic (%)	Non-Hispanic White (%)
What is your birthday?	No Difference	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	Difference	1 (100)	0 (0)	1 (100)	0 (0)	1 (100)
How tall were you at age 18? ¹	No Difference	60 (60)	21 (58)	39 (61)	19 (63)	41 (59)
	Difference	36 (36)	13 (36)	23 (36)	9 (15)	27 (39)
	Don't know/Missing	4 (4)	2 (6)	2 (3)	2 (7)	2 (2)
How tall were you at age 65? ²	No Difference	43 (100)	14 (100)	29 (100)	11 (100)	32 (100)
	Difference	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
How much do you weigh currently? ³ (not age adjusted)	No Difference	75 (77)	27 (75)	48 (79)	21 (72)	54 (79)
	Difference	22 (23)	9 (25)	13 (21)	8 (28)	14 (21)
Have you ever used hormone replacement therapy for any reason?	No Difference	83 (83)	28 (93)	55 (79)	29 (81)	54 (84)
	Difference	17 (17)	2 (7)	15 (21)	7 (9)	10 (16)
Since your NMWHS interview, have you been diagnosed with any cancer other than breast cancer?	No Difference	97 (97)	30 (100)	67 (96)	35 (97)	62 (97)
	Difference	3 (3)	0 (0)	3 (4)	1 (3)	2 (3)
Have you ever been diagnosed with diabetes (high blood sugar)?	No Difference	95 (95)	28 (93)	67 (96)	34 (94)	61 (95)
	Difference	5 (5)	2 (7)	3 (4)	2 (6)	3 (5)
Mother diagnosed with breast cancer?	No Difference	98 (98)	29 (97)	69 (99)	36 (100)	62 (97)
	Difference	2 (2)	1 (3)	1 (1)	0 (0)	2 (3)
Mother diagnosed with colon cancer? ⁴	No Difference	95 (96)	29 (97)	66 (96)	35 (97)	60 (95)
	Difference	4 (4)	1 (3)	3 (4)	1 (3)	3 (5)
Sister diagnosed with breast cancer?	No Difference	70 (70)	25 (83)	45 (64)	30 (83)	40 (63)
	Difference	30 (30)	5 (17)	25 (36)	6 (17)	24 (37)
Sister diagnosed with colon cancer? ⁴	No Difference	72 (73)	26 (87)	46 (67)	31 (86)	41 (65)
	Difference	27 (27)	4 (13)	23 (33)	5 (14)	22 (35)
Daughter diagnosed with breast cancer?	No Difference	67 (67)	21 (70)	46 (66)	19 (53)	48 (75)
	Difference	33 (33)	9 (30)	24 (34)	17 (47)	16 (25)
Daughter diagnosed with colon cancer? ⁴	No Difference	67 (68)	22 (73)	45 (65)	20 (56)	47 (75)
	Difference	32 (32)	8 (27)	24 (35)	16 (44)	16 (25)
Have you smoked at least 100 cigarettes in your entire life?	No difference	94 (94)	29 (97)	65 (93)	33 (92)	61 (95)
	Difference	5 (5)	1 (3)	4 (6)	3 (8)	2 (3)
	Missing	1 (1)	0 (0)	1 (1)	0 (0)	1 (2)

¹ Difference = greater than 1/2 inch; ² 43 (43%) women were =< 65 years of age at the time of the QC interview; ³ 97 (97%) women answered the question both times and difference= greater than 2 lbs; ⁴ N=99 for this question. Not asked in Self-Administered version

KEY FINDINGS

- ❖ Compared to their response during the baseline, women reported differently during follow-up interview about the language they usually used with their parents. They were also moderately inconsistent about their parents place of birth.
- ❖ Participants were consistent with their responses during baseline and follow-up when asked about their own ethnicity, their parents ethnicity and their smoking habits.
- ❖ Compared to the LTQOL interview, women reported differently during their QC interview about their height at age 18 and about their sister's and daughter's diagnosis of breast and colon cancer.
- ❖ Women were consistent about their personal information and about their mother's cancer diagnosis.
- ❖ Overall women were consistent in their response except when asked to recall from remote past.

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