

BRIEF COMMUNICATION

BREAST CANCER HYPOTHESIS 1978: SHIFT OF THE CONCEPTUAL FRAMEWORK

Gjorgov AN

Retired Lecturer, Faculty of Medicine, Kuwait University

*Research hypotheses are 'ultimately
tested by their own predictions.' –
Karl Popper (paraphrased)*

Abstract: One hundred medical hypotheses from the 1970s were reviewed, in a book in London, UK, in order to reassess the predictive values and practical realizations of hypotheses suggested more than 30 years ago. The hypothesis-testing study of breast cancer of 1978, corroborating evidence of a significant association between barrier contraception (condom use) and breast cancer in American married women was also included (№ 44). As a reply, presented is the evolving line of the hypothesis into evidence of the potential of primary prevention of the disease, and a Table of the envisioned shift of the conceptual framework (paradigm) of breast cancer.

Key words. Hypothesis 1978, Condom use, Breast cancer, Evidence, Association, Primary prevention, Paradigm shift.

This is a reply to the recent review of 100 hypotheses published long ago in the journal "Medical Hypotheses" (Editor David Horrobin, Montreal, Canada), in the decade of 1970s, The collected hypotheses for renewed review were summarized in the book 'Death Can Be Cured and 99 Other Medical Hypotheses,' by Roger Dobson, Cian Com Publ. Ltd, London, in 2007. My initial, 1978 study was referred as No. 44 (pp. 86–87), in the collection under the title 'Condoms increase risk of breast cancer' The idea for and the objective of the collection of 100 medical hypotheses was to initiate a renewed debate and reassessment of the vision, predictive values, creative ideas, and the potential for implementation of the medical hypotheses postulated one generation ago.

My seemingly forgotten hypothesis-testing study, entitled: "Barrier Contraceptive Practice and Male Infertility as Related Factors to Breast Cancer in Married Women," (*Medical Hypotheses* 1978 March-April; 4(2): 79–88), included in the review, was not disputed. However, its placement under ambivalent title and context, may justify a brief clarification. This response is to try to highlight the evidence and the new approach to the etiology and the potential of primary (no-drug) prevention of the breast cancer epidemic, as it evolved during the past three decades.

In a nutshell, the objective of the primary breast cancer study was to test an *a priori* hypothesis that a reduced exposure to human 'seminal factors' (condom use) in reproductive age of women was a risk factor of breast cancer. The hypothesis was corroborated by presenting evidence of a significant association between barrier contraception (condom use or withdrawal practice) and breast cancer development in American married women. The study was endorsed by and carried out jointly out at both the University of North Carolina, at Chapel Hill, NC, and the University of Pennsylvania, in Philadelphia, PA, in the mid 1970s (more than eight years before the twin AIDS and breast cancer epidemics ever emerged). The results of the study were first presented at the meeting 'Program for Applied Research on Fertility Regulation (PARFR) Workshop on Risk, Benefits, and Controversies in Fertility Regulation,' in Arlington, Virginia, March 14–16, 1977.

The predictive power of the study was verified by the explicitly predicted natural experiment of a breast cancer upsurge soon after the condom-promotion campaign, in 1980s. The prediction was further elaborated by a number of field and ecological studies and an experimental trial, along with the re-tested studies in France and the former USSR. A new fact of life was revealed, that condomization of female sexuality is a major, distinct root cause of the breast cancer epidemic.

The subsequent investigations strongly confirmed a preventive potential in the studies, such as:

- ◆ Prediction of future events (of the impending natural experiment of a breast cancer upsurge);
- ◆ Definition of a potential of primary, non-chemical preventive intervention in the community;
- ◆ Outline of preventive intervention of breast cancer and other specific diseases in women;
- ◆ Confirmation of a short latent time of breast cancer (instead of a 15–20 year long latency);
- ◆ Tested in animal model (rats) prevention of mammary carcinoma; with corroborative evidence;

- ◆ Explanation of age-specific incidence rates increase in younger women (< 50 y/a), termed 'debut' cases, due to the most frequently exposed ones to barrier contraception;
- ◆ Expanded testing of a 'sub-hypothesis' of anorexia-bulimia disorders in girls, teenagers and other young women exposed to barrier contraception, with corroborative evidence;
- ◆ Testing the breast-cancer risk factors of thyroid cancer in women, with corroborative evidence;
- ◆ Assessment of a favorable cost-effectiveness of the breast-cancer epidemic prevention,
- ◆ Anticipation of a rapid elimination ('eradication' to levels of rare, sporadic cases) of the breast cancer epidemic, at personal, familial and community levels;
- ◆ Re-tested twice, in France¹, 1989, and the former SSSR², 2001, of the 'Gjorgov's hypothesis' (barrier contraception-condom use-and the breast cancer link), with corroborating results.

Conclusion is that breast cancer is a preventable epidemic disease. The current, unprecedented breast cancer epidemic in medical history apparently cannot end by its own; unless terminated by a planned human intervention. The practical elimination ('eradication' to levels of rare, sporadic cases) of the current breast cancer epidemic could be accomplished ostensibly in a few years, in the same rapid manner as the breast cancer epidemic first invaded the human race three decades ago (early 1980s). Elimination could be achieved by elimination of the condomization of female sexuality, the main risk risk-factor of breast cancer in the mainstream population(s). Since the information in public-health matters is superior to legislation, the empowerment of women and couples with the new information about prevention/protection against breast cancer and other accompanying female sex- (gender-) specific diseases is anticipated to be the right approach for preventive action. The concept of primary prevention of the epidemic breast cancer could hardly be applied unless the present policy of old paradigm, false information and other misconceptions, and vast profit interests are not challenged and reassessed. The enclosed Table 1 is an attempt to present the envisioned shift of the conceptual framework of breast cancer.

¹ Monique G. Lê, Annie Bachelot, and Catherine Hill. Characteristics of Reproductive Life and Risk of Breast Cancer in a Case-Control Study of Young Nulliparous Women. *Journal of Clinical Epidemiology* 1989; 42: 1227–1235,

² Pikhut PM, Levshin VF, and Moskaleva LI. Methods of contraception and the risk of breast cancer development. *Sovetskaya Medicina*, 1991; issue 12, pp. 70–72.

Enclosure

Table 1

Breast cancer epidemic: shift of the conceptual framework

Old Paradigm	New Paradigm
1. NO PREVENTION of Breast Cancer (BC)	1. YES, PRIMARY (non-chemical) PREVENTION of Breast Cancer
2. Public-health emphasis on mammography screening and early BC detection; Epidemiologically: (unreported) <i>in-situ</i> cases	2. Public-health emphasis on primary prevention; Instead of exposure to the BC risks; the <i>in-situ</i> cases counted as BC cases;
3. The risk factors of BC are not amenable	3. The main risk factor readily amenable; BC is preventable
4. Treatment and chemical prevention of the BC epidemic	4. Primary (non-chemical) prevention of BC as epidemic disease
5. Nutritional presumed causes (fat, alcohol, smoking, diet, environmental chemicals, toxins, etc), and Reproductive causes: Early menarche, Late births (> 30 yrs), Family history, Low parity, No breastfeeding, OC pill use, Late menopause, Lack of exercise, 'Marital' Infertility issue, and other BC risk factors; Genes and genetic mutations	5. SEMEN-FACTOR DEFICIENCY tested hypothesis: The main etiological cause: the widespread use of BARRIER methods: of contraception: CONDOM DEVICES, WITHDRAWAL practice and male sterility/infertility in marriages. Condom-use technical effects of absolute male sterility: CONDOMIZATION of female sexuality due to STERILE MATING; False information on barrier contraceptive device (condom)
6. Environmental toxic substances & Industrial waste as BC causes, Polluted living settings (home, food, water, working place, streets); Radiation; Gene mutations	6. INVERSE environmental factor of BC: absence or elimination of putative protective factors in the intimate (sexual) ecosystem and inter-human micro-environment
7. Toxic environmental waste as direct cause of BC	7. Toxic waste: Indirect cause of BC <i>via</i> male infertility
8. Estrogen-Progestin model; 'Toxic-loaded' bodies, HRT, Ignored carcinogenic effects of external steroids, 'Endocrine disrupters' as causes of the current BC epidemic	8. 'Deficiency' of Prostaglandins, seminal fluid; Inner endocrine imbalance in women-related to causes of BC; Foretold BC carcinogenicity of "exogenous hormones"(HRT)
9. Marriage as a social, psychological, economic & legal unit only. Biological independence of spouses-genders	9. Marriage (along sex & love): a biological union w/ profound physiological impact; Sex (gender) inter-dependence
10. BC: poorly known, 'random' disease; local treatment	10. BC a systemic disease, No known cure
11. Hopes & trials in BC chemoprevention (<i>Tamoxifen</i>)	11. High-tech devices (condoms, hormones-HRTs) gone wrong
12. BC: poorly understood disease, treated as a local one	12. BC: Systemic disease with no known cure

13. Focus on selected BC figures & emphasis to find cure	13. Research-based, hypothesis-tested evidence & data
14. 'Heroic' treatment procedures, endurance of women, learned helplessness and ignorance for self-protection against BC; Decisions of BC 'reduction' at the top, governmental levels	14. Empowerment of women and couples with new information of the root cause and BC prevention; Cause-effectiveness assessment for protection made 'at the bottom,' at personal and family levels
15. BC as a political crisis, because of progressively rising epidemic spread of the malignant disease in the society	15. Solution/answer to the current, excess BC epidemic, subject to elimination by the will and commitment of highest political levels
16. The risk of BC unknown; Early detection & treatments as secondary prevention of early death, longer survival	16. Evidence-based definition of the main BC risk factor: Marital and persistent exposure to condomization of female sexuality
17. Focus on selected BC figures and prejudiced data	17. Evidence-based and hypothesis-tested results and data
18. Long latent period of BC: between 10–20 years or, starting even "in the womb" (both unsubstantiated)	18. Short BC latent period: between 2½ to five years; Evidence confirmed / verified by forecasted BC natural experiment
19. No comprehensive theory (conceptual vacuum) of BC & women's ill health and associated BC equivalents of tumors of the reproductive system; BC linked to ovarian cancer mainly	19. Comprehensive approach to women's health, as: BC, Ovarian cancer/cysts, uterine cancer/lesions, thyroid cancer/nodules. Anorexia disorders; female osteoporosis; Body-mind phenomena
20. BC prevalent in older, postmenopausal women (> 50)	20. Shift to young women (< 50); debut peak condom users
21. Current BC epidemic-rapid rise: Denial / artifact claims	21. Rise of the BC epidemic predicted; Verified by events
22. Officially, not recognized & nonexistent BC epidemic	22. Evidence of rapid, unabated and ever-rising BC epidemic
23. 'Second' most common malignant disease in women	23. BC – the commonest malignant disease in women
24. Competing high rates of Lung Cancer in women	24. Fueled by > 20% BC metastases to the lungs & other body sites
25. Higher BC incidence rates in white women	25. Initially, higher BC rates in women of higher living standards
26. Ostensibly, BC mortality decline due to early detection and BC screening programs; (Consensus: <i>in-situ</i> cases not to be included in the total annual number of BC figure)	26. The decline of BC mortality rates, most likely due to therapy and surgical modalities, particularly hysterectomy (with or without one-sided or two-sided oophorectomy), rather than mammography
27. Promotion of condoms as "safe" device for fertility-control and family-planning method	27. Elimination of condoms for contraceptive purposes in population as the main etiological risk of the BC epidemic
28. Priority: 'downstream' activities: screening for more cases & clinical salvage of BC affected women;	28. Priority: Prevention of the risks & cause(s) of current BC epidemic: shift to non-barrier birth-control methods

29. No definition of female response to sterile mating	29. Inner imbalance (Pseudopregnancy), Missed abortion
30. Primary (non-chemical) prevention of the BC epidemic not considered, despite the failed chemoprevention trials	30. Primary prevention ('eradication' to rare, sporadic cases), with estimated > 80% reduction at individual, family and community levels
31. Chemo-prevention of BC: assuming "wrong" female nature to be corrected by Tamoxifen/Raloxifene & drugs	31. Nothing wrong with women's nature subject to chemical correction: Misconceived toxic-substance prevention of BC
32. Ovarian, endometrial and thyroid cancers and other gynecological diseases as unrelated to BC entities	32. Ovarian, endometrial, thyroid & gynecological cancers, lesions due to the same etiology, condomization of women all ages
33. Silence and suppression of the information of the potential for prevention of the current BC epidemic	33. Decision (pending?) for non-mutually exclusive primary prevention against the twin epidemics of BC and AIDS
34. Plan for action: Search for cure, better therapy, and new drugs and 'better armamentarium' for BC screening	34. Needed official plan for action of BC prevention: Elimination of condom use for contraceptive purposes. Updated January 2010

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Резиме

**ХИПОТЕЗА ОД 1978 ГОДИНА ЗА РАКОТ НА ДОЈКА:
ПОМЕСТУВАЊЕ НА КОНЦЕПТУАЛНАТА РАМКА****Ѓоргов А.Н.***Пензиониран професор, Медицински факултет, Универзитет Кувајт*

Апстракт: Сто медицински хипотези од времето на 1970-те години беа преразгледани во една книга издадена во Лондон, Англија, со цел да се преоцени нивната предиктивна вредност и практичните реализации на хипотезите сугерирани пред повеќе од 30 години. Студијата што ја тестираше хипотезата за ракот на дојка во 1978 година, короборирајќи ги доказите за значајна поврзаност помеѓу бариерната контрацепција (употребата на кондоми) и ракот на дојка кај американските мажени жени беше, исто така, внесена во книгата (под број 44). Како одговор, изнесена е развојната линија на хипотезата како доказ за потенцијална примарна превенција на ракот на дојка, со табела на замислената смена на рамковната концепција (парадигма) за ракот на дојка.

Клучни зборови: хипотеза 1978, кондоми, рак на дојка, доказ, поврзаност, примарна превенција, смена на парадигма.

Corresponding Author:

Arne N. Gjorgov, M.D., Ph.D.
G. Hadzi-Panzov Street, No. 2
1000 Skopje, Republic of Macedonia
(UNC-SPH, Epidemiology, Chapel Hill, NC, USA)
Retired Lecturer, Faculty of Medicine,
Kuwait University

E-mail: arne.gjorgov@yahoo.com