

**ERD 2017**  
**Education, Reflection, Development, Fifth Edition**

**CASE STUDY ON PATIENTS' GENDER, LIFESTYLE AND  
COPING WITH NON-INVASIVE BLADDER CANCER**

Iris Zeitlin-Ophir (a)\*

\*Corresponding author

(a) 7 Hazalaphim st., Haifa Israel, Iris.zeitlin@gmail.com

***Abstract***

*Objective and rational:* The objective of this study case is to fill the gap in knowledge concerning patients' gender, lifestyle and coping with superficial non-invasive bladder cancer. Multi-disciplinary health caregivers face significant challenge in supporting and promoting patient's coping and compliance to meticulous surveillance. Cancer in the urine bladder is the 5th type of cancer in the Israeli population. Recurrence is seen in 50-70% of the patients, and 15% of patients will have a higher stage of carcinoma (meaning, transition from non-invasive phase to muscle invasion phase with sever health implications). However, non-invasive phase of the disease is often under estimated. Here presented preliminary findings. *Research method:* Eight patients receiving standard of care (at the Bnai-Zion Medical Center, Haifa, Israel) for superficial non-invasive bladder cancer, were randomly assigned to in-depth interviews, and gave their consent to participate. Interviews' Information was cross checked with patients' medical records. The study was approved by the Hospital Ethic Committee. Patients' demography: Gender: seven men and three women; Age range: fifty-six to seventy-three years; Religion: seven Jewish, one male Christian Arab; Education: Five patients have academic education; three patients have eleven to twelve years of education. *Results, Conclusions and Recommendations:* Discussion on preliminary findings from patients' narratives related to their gender, physical and emotional symptoms, lifestyle, and coping with superficial non-invasive bladder cancer will be presented. Conclusions and recommendations will emphasize the importance of integrative medical and social care program.

© 2018 Published by Future Academy [www.FutureAcademy.org.UK](http://www.FutureAcademy.org.UK)

**Keywords:** Gender, Lifestyle, Coping, Bladder Cancer.



## **1. Introduction**

The present case study provides an insight into the lived experiences of bladder cancer patients. The difficulties of coping with non-invasive phase of the disease are often underestimated when compared with those of the invasive phase. This case study may contribute to the efforts to fill the existing gap in knowledge on patient's lifestyle, symptoms, and coping, and can help multi-disciplinary health caregivers better adapt the care they provide to their patients through integrative social and medical care programs.

### **1.1. Cancer of the urinary bladder**

Cancer of the urinary bladder is the 5th most prevalent type of cancer in the Israeli population (5.8% of all types of tumors), and the 4th most prevalent cancer in the male population (9.4% of all tumors) (Ministry of Health, 2011). Comparisons between men and women show that bladder cancer is 4 times higher in men than it is in women (Romano-Zelekha, 2010; CBS, 2015). The cancer recurs in 50-70% of the patients within 3 years. Moreover, 15% of patients deteriorate to a more advanced stage of carcinoma, which penetrates the muscle of the bladder, requiring total resection of the bladder—a major surgery and a life-changing trauma (Aben & Kiemeny, 1999; Adami, Hunter, & Trichopoulos, 2002). The recurrence and progressive stages of bladder cancer have severe health implications. Therefore, multi-disciplinary health caregivers face significant challenges in supporting compliance and enhancing the patients' quality of life.

### **1.2. Gender and health**

Gender is acknowledged to be one of the most important socio-cultural factors affecting quality of life, health, and health-related behavior (Evans, Frank, Oliffe, & Gregory, 2011; ICN, 2013; EU Commission, 2013; Lutfiyya, Cannon, & Lipsky, 2014). In the past, most physiological studies of humans, except for the physiology of reproduction, focused on males (Miller, 2014; Shah, Palaskas, & Ahmed, 2016; Pang, Wang, Stinchcombe et al., 2016). Providing gender-appropriate care means expanding the focus from biological differences to recognizing that gender reflects the socially constructed roles, behaviors, activities, and attributes that a given society considers appropriate for men and women (Lutfiyaa et al., 2014). Some researchers have argued that women often report on their feelings and physical problems, as opposed to men, and are therefore perceived by physicians to suffer from higher rates of physical and emotional health problems than men are (Gijsbers Van Wijk, Van Vliet, & Kolk, 1996; Popay, Bartley, & Owen, 1993; Lutfiyaa et al., 2014). According to Wilhelm (2009), women report how they feel, men report what they do; and there is evidence that the provision of mental health services may be different for men and women (Raine, 2000).

In Western countries, findings indicate that men are nearly 3-4 times more likely to develop bladder cancer than are women, although women present with more advanced stages of the disease and have a worse survival rate. The female gender is also associated with significantly higher rates of bladder cancer-specific recurrence and mortality after radical cystectomy (Fajkovic, Halpern, Cha et al., 2011; Wilkins, Payne, Granville & Branney, 2008; Shariat, Sfakianos, Droller, Karakiewicz, Meryn, & Bochner, 2009). Social awareness of the differences in health needs should cause multi-disciplinary health teams to develop "gender-sensitive health care" (Gijsbers Van Wijk et al., 1996; Vienna NGO Forum, 1994), "personalized

medicine" (Hayes, Markus, Leslie, & Topol, 2014), or "individualized medicine" (Miller, 2014), in which the needs of individuals of both genders are taken into consideration in the planning and practice of high-quality healthcare, and in public health policy.

### **1.3. Lifestyle**

Lifestyle represents a mode of living (Sobel, 1981), and it was identified as one of four strategies to battle morbidity and premature death: (a) healthy lifestyle, (b) public policies, (c) healthy surroundings, and (d) high-quality health services (Secretary of State for Health, 1992; Jebb, Aveyard, & Hawkes, 2013; Kranzler, Davidovich, Fleischman, Grotto, Moran, & Weinstein, 2013). Traditionally, a healthy lifestyle includes abstinence from smoking, low body mass index, moderate alcohol consumption, regular exercise, and a healthy diet. (Dawson, 1994; Kurth, Moore, Gaziano et al., 2006; Health Promotion Agency, 2013; Schlesinger, Walter, Hampe et al., 2014; Samaha, Samaha, & Wyndham, 2007; Azaiza, 2013; The National Health and Lifestyle Survey, 2003; Kranzler et al., 2013). Two risk factor of bladder cancer are related to lifestyle: smoking and work-place exposure to certain industrial chemicals such as diesel fumes, organic chemicals, industrial rubber, leather, textiles, and paint products (Romano-Zelekha, 2010; American Cancer Society, 2016; Israeli Cancer Association, 2017).

### **1.4. Coping**

Bladder cancer patients must cope with the limitations imposed by their condition and require meticulous follow-ups (Billings & Moos, 1981; Roalsden, Aarsaether, Kunsten, & Patel, 2014). Coping was defined as the cognitive appraisal of a stressor and the behavioral effort needed to manage its demands (Folkman, 1984; Folkman et al., 1986; Lazarus & Folkman, 1984). To better understand how patients cope with their disease, Schreures & de Ridder (1997) suggested integrating the perspectives of coping and of social support. The quality of social support derived from social relationships may be associated with the adequacy of functioning (Billings & Moos, 1981). Lazarus (1993) mentioned two forms of coping. The first is problem-focused (decision making followed by direct action), the second is emotion-focused (efforts to decrease emotional stress and seek social support). We address both forms in this case study.

## **2. Problem Statement**

Not much is known yet on the difficulties of coping with non-invasive phase of the disease, and what can and should be done to help patients to cope with painful invasive procedures and disease burden in order to prevent deterioration t the invasive phase. Furthermore, there is a need to develop integrative holistic social and medical care programs to promote patients compliance to meticulous follow ups

## **3. Research Questions**

- 3.1.** What are the possible influences of gender and lifestyle on patients physical and emotional and social needs?
- 3.2.** What are the coping strategies of patients coping?
- 3.3.** How can multidisciplinary health teams collaborate to achieve patient compliance to meticulous survey through integrative social and medical care?

#### **4. Purpose of the Study**

Our first purpose is to contribute the efforts to fill the gap in knowledge concerning patients' gender, lifestyle and coping with superficial non-invasive bladder cancer.

We would also like to contribute to multi-disciplinary health caregivers to start planning integrative social and medical care programs in order to give superficial non-invasive bladder cancer patients optimal and qualitative treatment.

#### **5. Research Methods**

##### **5.1. Participants**

Eight participants with bladder cancer, (three women, five men), aged 46-73 years, participated in the study. Seven participants were Jewish, and one man was a Muslim Arab. Two participants were former immigrants from the former Soviet Union, who were not proficient in Hebrew and needed translation during the interview. In the case of one patient (Semyon), the translator was his daughter; in the case of the other patient (Irena), the translator was the nurse at the urology day care clinic. (All the patients are identified by pseudonyms.)

##### **5.2. Design**

We performed an open-ended, semi-structured qualitative analysis—interpretative phenomenological analysis—to explore the participants' subjective experience and coping with bladder cancer. The information obtained from the interviews was cross-checked with the patients' medical records.

##### **5.3. Methods**

We recruited eight patients receiving standard care at the Bnai-Zion Medical Center, Haifa, Israel, for the non-invasive phase of bladder cancer. This study is part of a research project based on a larger convenience sample, the data for which is currently being collected. This presentation includes our preliminary findings. The study was approved by the Bnai-Zion Hospital Ethical Committee. Before beginning the interviews, patients received an explanation about the objectives of the research, and decided freely whether or not to participate; written informed consent was obtained. Medical care was promised unconditionally, even if patients refused to participate or wished to stop the interview. The interviews were conducted during the patients' visit at the day care clinic, within the urology department of the hospital. Interviews lasted approximately 60 minutes, were transcribed verbatim, and analysed idiographically before completing a cross-case analysis. All the interviews were conducted by the author.

#### **6. Findings**

Analysis of the transcripts was conducted in relation to the participants' gender and resulted in three super ordinate themes: (a) patients' lifestyle in relation to morbidity and the recurrence of tumors in the bladder; (b) patients' physical and emotional complaints; and (c) patients' coping.

Super ordinate themes:

### **6.1. Lifestyle in relation to bladder cancer**

Seven patients were active smokers (at present or in the past), and the father of the remaining patient was a heavy smoker. All eight patients were exposed at work to dangerous industrial chemicals, organic compounds, or paints. Additionally, all eight patients were exposed to industrial and car pollution in their living area (the city of Haifa, its surroundings, and the Galilee). Note that the effect of carcinogenic chemicals is not immediate and may be discovered up to 25 years after exposure (Romano-Zelekha, 2010; American Cancer Society, 2016; Israeli Cancer Association, 2017).

#### **6.1.1. Exposure to smoking and workplace hazards**

Haim (60 years old): "I was smoking cigarettes for several years (during my military service) and stopped at the age of 25. We were expecting our first child. I owned a garage. I used acids, detergents, and car paints. It evaporated in the air. I used a mask and gloves for protection. But it was in the air. I could smell it. I know it penetrates. Many of my friends, garage owners, told me they also became ill."

Maria (54): "My father used to smoke for many years, and I was exposed at work, preparing cytotoxic drugs."

Zeev (46): "I was 18 years old when I started to work as a house painter. I was in close contact with solvents, turpentine, and dust, lots of dust. I never used a protective mask or gloves, and I smoked two packs of cigarettes a day. I cannot stop smoking. I try to reduce. Currently I smoke half a pack a day."

### **6.2. Physical and emotional complaints**

The second superordinate theme was evident in all participants and attested to its importance and to its influence on the patients' quality of life. The main physical complaint was the frequency and urgency to urinate. Most patients wake up three to four times at night to urinate, which prevents them from having continuous sleep cycles. In the daytime, most of them feel tired and lacking energy. Some had to reduce the number of their working hours.

#### **6.2.1. The first symptoms that caused patients to seek medical help**

Five men and one woman reported that their first symptom was massive amounts of blood in the urine. Irena (72, sick for 4 months): "I had a lot of blood in the urine. I used the Internet, and then went to see my physician."

Zeev (46, sick for 5 months): "I woke up and I saw a lot of blood in the toilet."

Two women did not have blood in the urine but experienced either urinary retention or lack of control in urination.

Natalie (70, sick for 18 years): "I was not able to urinate for a couple of days. I didn't want to go to the hospital. Only drops of urine came out. I set in a warm tub for hours. This happens when the tumor grows back."

Maria (age 54, sick for 4 years): "I didn't have control over urination. If I didn't pay attention and go to the toilet at least once every hour, I wet my clothes."

### **6.2.2. Current physical symptoms**

Most of the male participants experience urgency and frequency of urination, day and night. They suffer from sleep disturbances, usually caused by the need to get up and urinate. The three female participants reported that they do not wake up more than once to urinate, and described their sleep as satisfactory. But a cross-check with their medical records showed that the three women have been prescribed sleep medications.

Maria (54, mother of a teenage daughter): "I fall asleep in minutes. Nothing bothers me or wakes me up. I even don't stay awake to find out if my daughter returned home late at night."

Zeev (46, sick for 5 months): "I hardly sleep. I go to bed by 11:30 and I sleep a little bit. And every night I wake up at least three to four times. After the treatment I hardly sleep at all. I suffer from pain and bleeding."

Haim (60, sick for 4 years): "I need to urinate urgently and frequently, day and night. At night I wake up three to four times to urinate. It is hard for me to fall asleep again. I hardly sleep."

### **6.2.3. Abdominal pain and burning sensation during urination**

Most participants experience disturbances during urination and lower abdominal pain, in particular during the period of treatments.

Natalie: "The only thing that helps me to keep the chemo inside the bladder for 80 minutes, as required, is a heating pillow."

Zeev: "I suffer from pain, bleeding, and a sense of burning during urination. I take 1 or 2 tablets of Dipyron. Sometimes I cry like a baby."

### **6.2.4. Health status**

As noted above, female gender is associated with a significantly higher rate of bladder cancer recurrence (Fajkovic, Halpern, Cha et al., 2011; Wilkins, et al., 2008; Shariat, Sfakianos, Droller et al., 2009). Our preliminary findings are consistent with the above literature. Interviews and medical records indicate that two women experienced recurrence of high-grade neoplasms, compared to men, who experienced the recurrence of low-grade tumors. The three women, however, also suffer from additional health conditions caused by breast cancer (two women) and multiple sclerosis (one woman), as opposed to the five men who have no other type of cancer.

## **6.3. Coping strategies**

### **6.3.1. Coping by direct action.**

All eight patients understand the importance of follow-ups and early detection of signs of tumor recurrence. According to their medical records, they fully comply with their care plan. The interviews revealed no differences between genders on direct coping strategy.

### **6.3.2. Emotion-focused coping.**

All eight patients reported receiving instrumental and emotional social support from close family. The interviewer met with the patients' spouses and close family members at the time patients received intra-

vesical installations, offering help, comfort, company, and encouragement. All eight patients reported their preference to share little information about their illness with the extended family or with colleagues at work.

Moses: "I didn't talk much about my situation. I shared only with family, a few close friends, and my boss at work. To colleagues at work and to acquaintances I told that I had an operation and I needed to continue some treatment. And that's all."

Semyon (translated by his daughter): "Sharing information is done only with close family. In Russian culture it is considered impolite behavior to talk about cancer."

Haim (bus driver): "Usually I drive the local bus line; a round takes an hour. I manage to get to the toilet on time at the central station."

### 6.3.3. Coping with stress and worries.

The efficient strategy mentioned by the majority of the participants is to keep busy (working, taking care of grandchildren, etc.). One female patient mentioned that becoming a patient placed various demands on her, which she defined as "extra work." Four men and two women continue to work. One woman is retired but keeps occupied with house work, friends, playing bridge, and traveling to spas. One man (house painter) had to stop working because he was forbidden exposure to paints, and unable to function. Currently he is unemployed, struggling with financial problems and suffering from excessive emotional distress. One man, who immigrated from the former Soviet Union 12 years ago, does not speak Hebrew and was not able to find a job.

Natalie: "In between treatments I try to avoid thinking. I cannot allow myself to be stressed. Furthermore, being ill means having tasks. Get a letter from here, do a cystoscopy, wait for results, etc. It's a great burden. I am actually working for the HMO."

**Table 01.** Demographic characteristics of participants

Name	Duration of illness	Gender	Age	Marital status	Religion	Education (yrs.)	Working / not working	Occupation
007 Haim	4 yrs.	Male	60	Married +4	Jewish	12	Working	Former car garage owner. Currently, bus driver
008 Zeev	5 months	Male	46	Divorced + 3	Muslim	11	Unemployed	Former house painter
010 Moses	5 months	Male	61	Married + 2	Jewish	16	Working	Engineer
011 Natalie	18 yrs.	Female	70	Married + 0	Jewish	16	Retired	Engineer
012 Semyon	5 yrs.	Male	64	Widow + 4	Jewish	12	Retired	Former bus driver
013 Maria	7 yrs.	Female	54	Single + 1	Jewish	16	Working	Nurse
014 Dmitry	7 yrs.	Male	64	Married + 3	Jewish	16	Working	Engineer
015 Irena	4 months	Female	72	Widow +0	Jewish	16	Working	Former accountant Currently, house cleaner

*\*All names are pseudonyms*

## 7. Conclusion

Cancer of the bladder is a chronic illness, but it involves acute episodes that place a heavy burden on the patient. Continuous surveillance is crucial for the recurrence of the disease and deterioration to the invasive phase. This case study provided an insight into the lived experiences of patients, with reference to their gender, lifestyle, and coping strategies, to fill the gap in our knowledge. The heavy burden imposed by the disease requires coping abilities and high-quality social support. Analysis of the interviews shows that patients use two main coping strategies: direct action (for example, attending treatments and follow-ups over time), and emotion-focused coping (for example, accepting social support from close family). Both genders use a combination of these coping strategies, with some differences. For example, the three women reported satisfactory sleep with the aid of sleep medication, whereas the five men suffered from frequent interruptions in sleep and did not seek pharmacological aids. Explanations are needed for these differences. Health professionals should acknowledge the sleep disturbances among non-invasive bladder cancer patients. Lack of sleep may lead to emotional exhaustion, less effective coping, and can have a negative impact on physical and emotional resistance against diseases to which the patient may or may not be susceptible. Further research is needed on this topic. In addition, all eight patients were exposed to cigarette smoke and workplace carcinogens. Most of them stopped smoking and changed their workplace, avoiding further exposure.

In sum, using integrative social and medical care programs, healthcare professionals may become aware of patients' needs and coping strategies. They must consider the patients' physical, mental, emotional, and socio-cultural condition in order to provide high-quality healthcare, consistent with the patients' cultural values, needs, and preferences (Leininger & Mcfarland, 2006). They also play an important role in promoting policy makers' awareness of the importance of prevention bladder cancer at the individual and community levels.

## Acknowledgments

I would like to thank Prof.Dr. Doina Balahur my doctoral supervisor; Prof.Dr. Ofer Nativ Head of the Urology Settings at the Bnai Zion Medical Center, Haifa Isreal, Mrs, Kohava Biton Head nurse of the Urology Department, Mrs Natalie Malul Head Nurse of the Urology day care clinic, the medical and nursing staff and Mrs. Ilana Merhave Head librarian of the Bnai Zion library.

## References

- Aben, K.K.H., Kiemeny, L.A.L.M. (1999). Epidemiology of bladder cancer. *European Urology*. 36(6): 1-12. Retrieved from: <https://doi.org/10.1159/000020069>
- Adami, H.O., Hunter, D. & Trichopoulos, D. (Eds.). (2002). *Text Book of Cancer Epidemiology*, Oxford University Press, UK.
- American Cancer Society (2016). Bladder cancer risk factors. Retrieved from:
- Azaiza, F. (2013). Processes of conservation and change in Arab society in Israel: Implications for the health and welfare of the Arab population. *Int J Soc Welfare* 22(1): 15–24. Retrieved from: <http://dx.doi.org/10.1111/j.1468-2397.2011.00866.x>



- Billings, A.G., & Moos, R.H. (1981). The role of coping responses and social resources in attenuating the stress of life events. *Journal of Behavioral Medicine*, 4(2): 139-157. Retrieved from: <http://dx.doi.org/10.1007/BF00844267>
- Central Bureau of Statistics CBS (2015). Newly reported cases of malignant neoplasms at selected sites, by sex and age 2012. Retrieved from:
- Dawson, J. (1994). Health and lifestyle surveys: beyond health status indicators *Health Education Journal* 53: 300-308. Retrieved from: <https://doi.org/10.1177/001789699405300308>
- European Commission (2013). EU Commission document Commission staff working document - Report on Progress on Equality between Women and Men in 2013. Brussels. Pp:1-4. Retrieved from: [http://ec.europa.eu/justice/gender-equality/files/swd\\_2014\\_142\\_en.pdf](http://ec.europa.eu/justice/gender-equality/files/swd_2014_142_en.pdf)
- Evans, J., Frank, B., Oliffe, J.L. & Gregory, D. (2011). Health, illness, men and masculinities (HIMM): a theoretical framework for understanding men and their health. *Journal of Men's Health* 8(1): 7-15. Retrieved: <http://dx.doi.org/10.1016/j.jomh.2010.09.227>
- Fajkovic, H., Halpern, J.A., Cha, E.K., Bahadori, A., Chromecki, T.F., Karakiewicz, P.I., Breinl, E., Mersburger, A.S. & Shariat, S.F. (2011). Impact of gender on bladder cancer incidence, staging and prognosis. *World Journal of Urology* 29(4): 457-463. Retrieved from: <http://dx.doi.org/10.1007/s00345-011-0709-9>
- Folkman, S. (1984). Personal control and stress and coping processes: a theoretical analysis. *Journal of Personality and Social Psychology* 46(4): 839-852.
- Folkman, S., Lazarus, R.S., Dunkel-Schetter, C., DeLongis, A. & Gruen, R.J. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology*, 50(5): 992-1003.
- Gijsbers Van Wijk, C.M.T, Van Vliet, K.P., & Kolk, A.M. (1996). Gender perspectives and quality of care: Towards appropriate and adequate health care for women *Social Science and Medicine*, 43(5): 707-720. Retrieved from: [http://dx.doi.org/10.1016/0277-9536\(96\)00115-3](http://dx.doi.org/10.1016/0277-9536(96)00115-3)
- Hayes, D.F., Markus, H.S., Leslie, D. & Topol E.J. (2014). Personalized medicine: risk prediction, targeted therapies and mobile health technology. *Bio Med Central Medicine*, 12(37) : 1-8 Retrieved from: <http://dx.doi.org/10.1186/1741-7015-12-37>
- Health Promotion Agency. (2013). *Methodology Report for the 2012 Health and Lifestyles Survey*. Health Promotion Agency Research and Evaluation Unit. Wellington: New Zealand. Retrieved from official site: <http://www.hpa.org.nz/sites/default/files/Methodology%20report%20for%20the%202012%20HLS%20V5%20%283%29.pdf>
- <http://dx.doi.org/10.1111/j.1365-2648.2007.04338.x>
- [http://www.cbs.gov.il/reader/shnaton/templ\\_shnaton.html?num\\_tab=st06\\_13&CYear=2015](http://www.cbs.gov.il/reader/shnaton/templ_shnaton.html?num_tab=st06_13&CYear=2015)
- <https://www.cancer.org/cancer/bladder-cancer/causes-risks-prevention/risk-factors.html>
- International Council of nurses ICN (2013). A life course approach to improve the health and wellbeing of women evidence, trends and action. Geneva, Switzerland Retrieved from official site: [http://www.icn.ch/images/stories/documents/publications/free\\_publications/Improving\\_Womens\\_Health.pdf](http://www.icn.ch/images/stories/documents/publications/free_publications/Improving_Womens_Health.pdf)
- Israeli Cancer Association. (2017). *Bladder cancer risk factors* (in Hebrew). Retrieved from: <http://www.cancer.org.il/template/default.aspx?PageId=5900>
- Jebb, S.A., Aveyard, P.N. & Hawkes, C. (2013). The evolution of policy and actions to tackle obesity in England. *Obesity Reviews* 14(2): 42-59. Retrieved from: <http://dx.doi.org/10.1111/obr.12093>
- Kranzler, Y., Davidovich, N., Fleischman, Y., Grotto, I., Moran, D.S., Weinstein, R. (2013). A health in all policies approach to promote active, healthy lifestyle in Israel. *Israel Journal of Health Policy Research* 2(16): 1-14. Retrieved from: <https://doi.org/10.1186/2045-4015-2-16>
- Kurth, T., Moore, S.T., Gaziano, J.M., Kase, C.S., Stampfer, M.J., Berger, K., Buring, J.E. (2006). Healthy Lifestyle and the Risk of Stroke in Women. *Arch Intern Med*. 166(13):1403-1409. Retrieved from: <http://dx.doi.org/10.1001/archinte.166.13.1403>

- Lazarus, R.S. (1993). Coping theory and research: past, present and future. *Psychosomatic Medicine* 55(3): 234-247.
- Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal and coping*. Springer, New York.
- Leininger, M. M., McFarland, M. R. (2006). *Culture care diversity and universality- a worldwide nursing theory*, Sudbury, MA, Jones and Bartlett Pub.
- Lutfiyya, M.N., Cannon, M., Lipsky, M.S. (2014). An argument for male gender as a root cause or fundamental social determinant of health. *Disease a Month* 60(4): 145-149. Retrieved from: <http://dx.doi.org/10.1016/j.disamonth.2014.02.002>
- Miller, V.M. (2014). Why are sex and gender important to basic physiology and translational and individualized medicine?. *Journal of Physiology - Heart and Circulatory Physiology* 306 (6): H781-H788. Retrieved from: <http://dx.doi.org/10.1152/ajpheart.00994.2013>
- Ministry of Health (2011). Health status in Israel 2010. Jerusalem, Israel (In Hebrew). Retrieved from: [http://www.health.gov.il/PublicationsFiles/Health\\_Status\\_in\\_Israel2010.pdf](http://www.health.gov.il/PublicationsFiles/Health_Status_in_Israel2010.pdf)
- Pang, H.H., Wang, X., Stinchcombe, T.E., Wong, M.L., Cheng, P., Ganti, A.K., Sargent,... & E.E. Vokes, (2016). Enrollment Trends and disparity among patients with lung cancer in national clinical trials, 1990 to 2012. *Journal of Clinical Oncology* 34(33): 3992-3999. Retrieved from: <http://dx.doi.org/10.1200/JCO.2016.67.7088>
- Popay J., Bartley M., & Owen C. (1993) Gender inequalities in health: social position, affective disorders and minor physical morbidity. *Social Science and Medicine* 36(1):21-32. Retrieved from: [http://dx.doi.org/10.1016/0277-9536\(93\)90302-K](http://dx.doi.org/10.1016/0277-9536(93)90302-K)
- Raine, R. (2000). Does Gender Bias Exist in the Use of Specialist Health Care?. *J Health Serv Res Policy* 5(4): 237-249. Retrieved from: <http://dx.doi.org/10.1177/135581960000500409>
- Roalsden, M., Aarsaether, E., Kunsten, T., & Patel H.R.H. (2014). Strategies to improve quality of life in bladder cancer patients. *Expert Review of Pharmacoeconomics and Outcomes Research*, 14(4): 537-544. Retrieved from: <http://dx.doi.org/10.1586/14737167.2014.917967>
- Romano-zelekha, O. (2010). *A matched case control study of sex differences in bladder cancer incidence and risk factors* (Thesis submitted for the degree of "Doctor in philosophy"). Tel Aviv, Tel Aviv University.
- Samaha, E., Lal, S., Samaha, N., & Wyndham, J. (2007). Psychological, lifestyle and coping contributors to chronic fatigue in shift-worker nurses. *Journal of Advanced Nursing*, 59(3): 221-232. Retrieved from:
- Schlesinger, S., Walter, J., Hampe, J., von Schoenfels, V., Hinz, S., Ku"chler, T., Jacobs, G., Schafmayer, C., & No"thlings, U. (2014). Lifestyle factors and health-related quality of life in colorectal cancer survivors. *Cancer Causes Control*, 25(1): 99-110. Retrieved from: <http://dx.doi.org/10.1007/s10552-013-0313-y>
- Schreurs, K.M., & de Ridder, D.T. (1997). Integration of coping and social support perspectives: implications for the study of adaptation to chronic disease. *Clinical Psychology Review*, 17(1): 89-112. Retrieved from: [https://doi.org/10.1016/S0272-7358\(96\)00050-5](https://doi.org/10.1016/S0272-7358(96)00050-5)
- Secretary of State for Health. (1992). *The Health of the Nation: a Strategy for Health in England*. London: Department of Health HMSO.
- Shah, T., Palaskas, N., & Ahmed, A. (2016). An Update on Gender Disparities in Coronary Heart Disease Care. *Current Atherosclerosis Reports*, 18(5): 28. Retrieved from: <http://dx.doi.org/10.1007/s11883-016-0574-5>
- Shariat, S.F., Sfakianos, J.P., Droller, M.J., Karakiewicz, P.I., Meryn, S., & Bochner, B.H. (2009). The effect of age and gender on bladder cancer: a critical review of the literature. *BJU Int.*, 105(3): 300-8. Retrieved from: <https://doi.org/10.1111/j.1464-410X.2009.09076.x>
- Sobel, E.M. (1981). *Lifestyle and social structure: concepts, definitions, analyses*. New York, Academic Press.
- Vienna NGO Forum '94. Women in the ECE region prepare for Beijing '95, Final Report, Vienna, 12-15 October 1994. In: Gijsbers Van...et al (1996).

Wilkins, D., Payne, S., Granville, G., & Branney, P. (2008). *The gender and access to health services study: Final report*. Reference (10323 ed.) Department of Health: Men's Health Forum. University of Bristol, UK. Retrieved from:  
[http://www.academia.edu/1254973/The\\_Gender\\_and\\_Access\\_to\\_Health\\_Services\\_Study\\_Final\\_Report](http://www.academia.edu/1254973/The_Gender_and_Access_to_Health_Services_Study_Final_Report)