**Reports by family medicine residents on their training and attitudes towards preventive medicine for cardiovascular disease and colorectal cancer**

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**Abstract:**

**Introduction**

The purpose of measures taken by preventive medicine and health promotion is to extend life expectancy, improve quality of life and create more years free from disease and limitations (“healthy years”). This may be carried out in the context of work with individuals, families, or communities.

An overview of the literature found that attitudes of primary physicians regarding prevention are usually positive, but physicians express doubt as to their ability to influence patients. Other papers in the field of primary medicine have found that almost all physicians agree that there is a need to improve patients’ behaviors and to minimize risk factors, but few have belief in their own self-efficacy.1

# By taking initial preventative measures within the public sphere, the rate of early mortality from cardiovascular disease and cancer may be reduced by approximately 50% versus when these measures are not taken.2

According to a British study, despite work overload in the community, family doctors’ attitudes are positive regarding the promotion of health and a healthy lifestyle. An increase in the number of routine referrals from patients on the subject of “a healthy lifestyle” has occurred over the course of the last 10 years, but physicians’ beliefs in the efficacy of their efforts to help the patient in this aspect is low. More training and support are required for an intervention plan by physicians to promote a healthy lifestyle.3

According to the literature,4 the rate of insurees with documentation of their smoking habits in the last five years (among insurees between 16-74 yrs. of age) was approximately 84% in 2013 and that there is good documentation by the treating physician regarding smoking. Despite this, there is a high percentage of smokers that are unable to quit smoking; according to surveys, family physicians do not act in accordance with recommendations on the subject of patient counseling regarding smoking cessation. In Israel, the rate of smoking is quite high. In the adult population in 2012, it was 20.6%.4 Therefore, there is great importance in physician intervention on this subject. Even if 1-3% more people quit smoking, it is lifesaving.5

In the 1980s, three studies showed that without a doubt, a fecal occult blood test once a year may reduce the mortality of colorectal cancer by a rate of between 15-30% on the condition that a positive result leads to a colonoscopy being performed.6-10 Despite this, it was found that the frequency of screening in Israel for colorectal cancer is low and that in 2013, the rate of performing exams among 50-74-yr.-olds stood at 56.6%11, 4, much lower than in the U.S. This low rate is attributed to failures in the health system as well as barriers leading to failures in physician-patient communication.12

In a number of studies that examined physicians’ attitudes regarding preventive medicine and barriers to carrying out preventive intervention plans, the relative importance of barriers, in general, and in connotation with specific prevention, was not identified. Certain barriers may be linked only to a subgroup of preventive intervention.

**Objectives:** The primary objective of this study is to exam the knowledge, attitudes and behaviors of physicians doing their residency in family medicine regarding identification and prevention of risk factors for cardiovascular disease (CVD) in addition to malignant diseases.

**Secondary objectives:**

* To examine the scope of experience that family medicine residents have acquired during residency in the areas of: prevention, early detection, and patient counseling on the prevention of CVD and cancer.
* To examine the extent of their reporting and meticulousness in filling out risk factors (weight, height, smoking, physical activity) in patient medical records (subjective question – according to self-reporting).
* To assess the quality of residency and resident training in terms of disease prevention and screening; to what extent do family medicine residents have positive attitudes on the subject of prevention and reduction of risk factors in patients; and to what extent do they themselves adhere to healthy behavior.

**Methods**

**Population:** The study included all of the family medicine residents in Israel throughout the years of residency (1st-4th years). The questionnaire was sent to approximately 450 residents, who were requested to answer electronically or manually (according to preference).

**Measures:** Those examined replied to the comprehensive questionnaire which included 64 questions on the subjects of:

1. residents’ attitudes from the aspect of preventive medicine and healthy behavior
2. their clinical experience in identifying risk factors and patient counseling
3. residents’ self-assessment of their residency on the subject of preventive medicine and health promotion.

The questionnaire was filled out anonymously and is based on questionnaires on these subjects that have been published in the research literature from Israel and around the world. Questions about personal background, smoking status, etc. were also included (Appendix 1).

**Results**

Compliance in filling out the questionnaires was 30% (138 replies out of 450). The description of demographic characteristics of the study population is presented in Table 1. The study included all family medicine residents in Israel at all stages of residency, and the majority of residents who responded were men in the early years of residency.

Table 2 present a description of the responses to questions of theoretical knowledge in the field of preventive medicine for the prevention of cancer and cardiac disease. The questions focused on areas in preventive medicine recommended to be performed according to accepted medical guidelines and work procedures at the health maintenance organization (HMO). Questions were taken from the Stage A exams in family medicine and from world literature.

In general, it appears that there is a decent level of theoretical knowledge among the residents. For most questions, over 81% chose the correct answer, except for Question 3, which only 56% answered correctly. (The question involved a 45 yr.-old male, family history of hypertension [mother]. On exam, Bp 120/80. How often do you have to measure blood pressure?)

Table 3 describes residents’ attitudes toward the subject of health promotion and preventive medicine for cardiac disease and cancer, from the personal aspect as well as in their own behavior towards patients. Almost all of the residents (94%) answered that preventive medicine is very important. Approximately 80% noted that it is very important that the physician exemplify healthy behavior, but only about 33% do regular physical activity as recommended (over 150 weekly hours).

Table 4 presents the residents’ clinical experience. With regards to clinical experience in cancer situations, approximately 64% feel that they have not been exposed, or have received very little exposure, in the area of screening for melanoma. Approximately 80% note that they received a sufficient to significant amount of exposure on the subject of screening exams for breast cancer. Approximately 53% of residents feel that they have not received, or have received very little exposure in the area of screening for prostate cancer. Approximately 90% note that they have received a sufficient to significant amount in the area of screening for colorectal cancer.

**Residency program:** The residents noted that the time dedicated in their study program to oncology was insufficient or very minimal, and sufficient to significant in the area of cardiovascular disease.

**Discussion**

In this survey, we examined subjects’ attitudes and behaviors regarding disease prevention and reduction of risk factors during the stages of their residency. Many surveys conducted worldwide found that primary physicians’ attitudes regarding prevention are usually positive, but they express doubt in their own ability to influence patients. It was also found that physicians agree that there is a need to improve their patients’ behavior in order to reduce risk factors, but only a minority believe in their ability to be effective in this area.1

In oursurvey, we found that 94% think preventive medicine has a high degree of importance; the program to promote health requires more training and support13 regarding intervention by physicians in maintaining a healthy lifestyle.

According to findings in this survey, we may conclude that the majority of residents have a very positive attitude towards preventive medicine, but most do not personally behave in a healthy manner that is consistent with international and Israeli research literature. The response of residents in the advanced stages of residency demonstrates that their theoretical knowledge is fairly good; however, knowledge on its own is insufficient to implement a proper approach suitable for preventive medicine. We recommend that in the first year of residency, residents’ knowledge on the pop-up window be expanded, even if they are only working temporarily at a clinic, and to encourage them to initiate visits on this subject.

The results show the low exposure of residents to cancer disease. Approximately 64% did not perform melanoma screening, approximately 53% did not perform screening tests for prostate cancer, approximately 56% did not have experience with lung cancer patients and approximately 74% did not have experience with melanoma patients. A review of the literature found that in 2014, 1580 new patients with melanoma of the skin were diagnosed in Israel, 1095 with invasive tumor and 485 with tumor in situ.14 Such low exposure to clinical situations may derive from a number of reasons: a low incidence of the disease, the residents feeling that they are not the “responsible physician” during the time the patient is transferred to the oncology institute or to another treating physician (for example a consulting physician), extensive knowledge is required in order to treat the various types of cancer and it is difficult for residents to acquire all the knowledge required for these conditions, and the existence of various ambiguous guidelines, for example for prostate cancer screening and lung cancer. An additional reason is that in the first and second years of residency, the residents are in the teaching clinics with a close advisor without exposure to regular patients, and the residents’ work at this stage of residency is characterized by treatment of acute or administrative cases (regular medications, sick-day certificates, etc.).

**Conclusions**

According to data, we can see that there is good theoretical knowledge among Israeli family medicine residents, and this is consistent with the scientific literature. Residents’ attitude is positive regarding preventive medicine in the area of prevention of cardiac disease and cancer, from both the personal and general aspect. However, implementation of this knowledge in the clinic is not necessarily carried out at the required level, according to Ministry of Health or HMO guidelines. Therefore, we recommend:

1. Engaging family medicine residents on the subject of preventive medicine from the start and requiring them to fill out the pop-up window in the medical record.
2. Informing residents of the importance of direct cooperation with their advisor and with the clinic’s staff, including nurses, on the subject of preventive medicine as well as filling out “a quality passport,” so that they cope with the subject in real time from the beginning of their residency. They should also be involved with and exposed to acute diseases in family medicine to decrease the difficulty the residents have in these areas.
3. Assistance by a computerized system that identifies patients at high risk for cardiovascular diseases who visit the physician on the same day (such as “the Lider system” used in Clalit [HMO] clinics) or a computerized system which identifies patients that are also at high risk who do not visit at all (such as “the Bina System” used in Clalit clinics).
4. Maintenance (by the family medicine resident and the community physician) of a personal medical record of patient names known to them who have low compliance to treatment, and informing the rest of the clinic staff of these patients to receive their help in convincing the patients to perform screening tests or important laboratory tests as a tool to detect risk factors
5. Emphasizing cancer during residents’ clinical experience and using real cases at the clinic as well as case descriptions from the literature. Moreover, we recommend that residents conduct rounds in the oncology department for additional exposure to cases. It is important to note that “home hospice” has existed in Israel’s Southern District for a number of years and constitutes part of residency in family medicine; therefore, residents of the Southern District feel more confident on the subject of cancer. All family medicine residents should be exposed to home hospice.
6. Dedicating more time in the curriculum to various areas in preventive medicine for heart disease and cancer.
7. Introducing nutritional consultation into the curriculum in the early stages of residency (beginning in the first year).

**Table 1: Demographic characteristics of the study population (N=150)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **N** | **%** |  |  | **N** | **%** |
| **Gender** |  |  |  | **Place of residency** |  |  |
| Male | 79 | 57.20% |  | South | 40 | 40% |
| Female | 59 | 42.80 |  | Sharon and Shomron | 17 | 17% |
|  | 138 | (mis)=12 |  | Dan Petach Tikva | 10 | 10% |
| **Age** |  |  |  | Haifa | 14 |  |
| Mean±standard deviation | 33.2±3.7 |  |  | Jerusalem | 7 | 7% |
| Range | 27-47 |  |  | Center | 6 | 6% |
|  | 135 | (mis=15) |  | North | 6 | 6% |
| **Family status** |  |  |  |  | 100 | (mis=50) |
| Unmarried | 17 | 12.30% |  | **Main practice** |  |  |
| Married | 120 | 87.00% |  | City | 97 | 71.30% |
| Divorced | 1 |  |  | Rural | 29 | 21.30% |
|  | 138 | (mis=12) |  | City and rural | 10 | 7.40% |
| **Years of experience as a physician** |  |  |  |  | 136 | (mis=14) |
| Mean±standard standard deviation | 3.7±3.0 |  |  | **Smoker** |  |  |
| Range | 0.2-25 |  |  | Yes | 13 | 9.30% |
|  | 135 | (mis=15) |  | No | 127 | 90.70% |
| **Years in Israel** |  |  |  |  | 140 | (mis=10) |
| Mean±standard standard deviation | 24.2±10.1 |  |  | **Number of cigarettes per day** |  |  |
| Range | 37-אפר |  |  | Mean±standard standard deviation | 10.7±6.6 |  |
|  | 12 | (mis=1) |  | Range | 20-פבר |  |
| **Year of residency** |  |  |  |  | 12 | (mis=1) |
|  | N | % |  |  | N | % |
| 1st | 52 | 38.00% |  | **BMI** |  |  |
| 2nd | 28 | 20.40% |  | Up to 25 | 78 | 56.90% |
| 3rd | 26 | 19.00% |  | 25.1-30 | 48 | 35% |
| 4th | 31 | 22.60% |  | 30.1+ | 11 | 8% |
|  | 137 | (mis=13) |  |  | 137 | (mis=13) |

**Table 2: Knowledge in the area of preventive medicine for cancer and cardiac disease**

|  |  |  |
| --- | --- | --- |
| Multiple-choice questions (the correct answer is marked with an asterisk) | N | % |
| **A 55-yr.-old female is interested in performing tests, what would you recommend to her?**Occult blood every two yearsTest for cholesterol every 5 years\*Perform a mammography every two yearsTest for CA-125 every year(mis=5) | 10111231145 | 6.9%7.6%84.8%0.7% |
| **What is the accepted test for prostate cancer screening according to world literature?**\*There is no recommendation to perform PSA as a screening testPSA once a year for men from the age of 50Rectal exam once a year for men from the age of 50Rectal exam + PSA once a year | 12112115149 | 81.2%8.1%7.4%3.4%(mis=1) |
| **A 45-yr.old male, family history of hypertension (mother). On examination Bp 120/80. How often should his blood pressure be measured?**Every six months\*Every yearEvery two years | 238443150 | 15.3%56.0%28.7% |
| **What is accepted practice according to the literature as a screening test for colon cancer?**\*Fecal occult blood from the age of 50 once a yearFecal occult blood from the age of 50 once every two years Colonoscopy once every 5 years | 1231116150 | 82.0%7.3%10.7% |
| **A 39-yr.-old male with a family history of colon cancer requests a colonoscopy. What would you recommend?**\*Perform a colonoscopyOccult blood from the age of 50Occult blood from the age of 40Occult blood every yearBarium enema | 13061040150 | 86.7%4.0%6.7%2.7%0.0% |
| \*Correct answer |  |  |

**Table 3: Attitudes in the area of preventive medicine, cancer and cardiac disease**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Unable to assess** | **Important to some extent - moderate extent** | **Important to a great extent** | **Total** |
| **N** | **%** | **N** | **%** | **N** | **%** |  |
| What is your attitude regarding the importance of preventive medicine | 2 | 1.3% | 7 | 4.7% | 141 | 94.0% | 150 |
| In your opinion, is it important that a physician personally maintains healthy behavior? | 2 | 1.3% | 29 | 19.5% | 118 | 79.2% | 149 |
| Are you vigilant about doing regular physical activity (over 150 weekly hours)? | 9 | 6.0% | 91 | 61.1% | 49 | 32.9% | 149 |
| Do you adhere to a guideline-based diet and eat at least 5 portions of vegetables and fruits a day? | 5 | 3.4% | 96 | 64.4% | 48 | 32.2% | 149 |
| In your opinion, does the physician have a responsibility to prevent disease in his patients | 5 | 3.3% | 21 | 14.0% | 124 | 82.7% | 150 |
| What is your position regarding the prevention of cancer | 4 | 2.7% | 27 | 18.1% | 118 | 79.2% | 149 |
| What is your position regarding the prevention of CVD disease | 1 | 0.7% | 13 | 8.7% | 135 | 90.6% | 149 |
| In your opinion, what is the level of responsibility that a physician has as opposed to a patient in prevention of disease | 1 | 0.7% | 74 | 49.7% | 74 | 49.7% | 149 |
| Would you refer your patient to a dietician for a guideline-based diet to prevent cardiovascular disease? | 1 | 0.7% | 42 | 28.2% | 106 | 71.1% | 149 |
| Would you recommend participation in a group for smoking cessation to your patient (if the patient smokes) | 12 | 8.1% | 13 | 8.7% | 124 | 83.2% | 149 |
| To what extent are you vigilant in filling out risk factors that your patient has (in the pop-up window) | 8 | 5.3% | 55 | 36.7% | 87 | 58.0% | 150 |
| To what extent are you vigilant in performing screening tests recommended by the HMO among your patients | 5 | 3.3% | 31 | 20.7% | 114 | 76.0% | 150 |
| In the event there is no patient compliance to screening tests, is there initiative on your part as a resident to refer him for screening tests? | 7 | 4.8% | 35 | 24.0% | 104  | 71.2% | 146 |

**Table 4:** **Clinical experience and exposure to clinical situations at the clinic during residency in family medicine**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Can not assess | Not at all – very little | Sufficient | A great deal | Total |
|  | N | % | N | % | N | % | N | % |  |
| **Clinical experience at the clinic** |  |  |  |  |  |  |  |  |  |
| Melanoma screening | 28 | 18.9% | 95 | 64.2% | 21 | 14.2% | 4 | 2.7% | 148 |
| Screening test for breast cancer | 10 | 6.8% | 19 | 12.9% | 55 | 37.4% | 63 | 42.9% | 147 |
| Screening test for prostate cancer | 18 | 12.2% | 78 | 52.7% | 35 | 23.6% | 17 | 11.5% | 148 |
| Screening test for colorectal cancer | 7 | 4.7% | 8 | 5.4% | 45 | 30.4% | 88 | 59.5% | 148 |
| Physical exam of heart and blood vessels | 8 | 5.4% | 20 | 13.5% | 61 | 41.2% | 59 | 39.9% | 148 |
| Balance of risk factors for CVD diseases | 7 | 4.8% | 10 | 6.8% | 61 | 41.5% | 69 | 46.9% | 147 |
| **Exposure to clinical situations at the clinic** |  |  |  |  |  |  |  |  |  |
| Lung cancer | 14 | 9.6% | 81 | 55.5% | 44 | 30.1% | 7 | 4.8% | 146 |
| Breast cancer | 9 | 6.2% | 47 | 32.2% | 70 | 47.9% | 20 | 13.7% | 146 |
| Melanoma | 22 | 15.1% | 108 | 74.0% | 13 | 8.9% | 3 | 2.1% | 146 |
| Prostate cancer | 14 | 9.6% | 80 | 54.8% | 37 | 25.3% | 15 | 10.3% | 146 |
| Uterine and ovarian cancer | 14 | 9.7% | 107 | 73.8% | 20 | 13.8% | 4 | 2.8% | 145 |
| Colorectal cancer | 9 | 6.2% | 41 | 28.1% | 71 | 48.6% | 25 | 17.1% | 146 |
| Leukemia | 13 | 9.0% | 110 | 75.9% | 18 | 12.4% | 4 | 2.8% | 145 |

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**Appendix 1: Study Questionnaire**

Dear Doctor,

We are conducting a study on family medicine residents’ training and their attitudes towards preventive medicine for cardiovascular disease and colorectal cancer. The study is conducted within the framework of research experience in the Department of Family Medicine. All data will be kept confidential and will be used for research purposes only.

You are free to choose not to answer some or any of the questions in the questionnaire and to stop answering the questionnaire at any time. We assure you that your identity will be kept confidential by all those involved in the study.

We thank you for your cooperation.

 Dr. Alhamamada Zead, Dr. Ziva Shetel,

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**Please mark the correct answer:**

1. A 55-yr.-old female is interested in performing tests, what would you recommend to her?
2. Occult blood every two years
3. Test for cholesterol every 5 years
4. Perform a mammography every two years
5. Test for CA-125 every year
6. **What is the accepted test for prostate cancer screening according to world literature?**
7. There is no recommendation to perform PSA as a screening test

 b. PSA once a year for men from the age of 50

c. Rectal exam once a year for men from the age of 50

d. Rectal exam + PSA once a year

**3. A 45-yr.old male, family history of hypertension (mother). On examination Bp 120/80. How often should his blood pressure be measured?**

1. Every six months
2. Every year
3. Every two years

**4. What is accepted practice according to the literature as a screening test for colon cancer?**

a. Fecal occult blood from the age of 50 once a year

b. Fecal occult blood from the age of 50 once every two years

c. Colonoscopy once every 5 years

**5. A 39-yr.-old male with a family history of colon cancer requests a colonoscopy. What would you recommend?**

a. Perform a colonoscopy

b. Occult blood from the age of 50

c. Occult blood from the age of 40

d. Occult blood every year

e. Barium enema

**We would appreciate if you could answer the following questions and mark the suitable answer on the scale, where 1 indicates the lowest level, and 4 or 5 the highest. Please mark 0 if you cannot answer.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **0****Unable to assess** | **1****Not /not at all imNot/not at all important** | **2****Important to some extent** | **3****Important to a moderate extent** | **4****Important to a great extent** | **5****Important to a great extent / most important** |
| 6. What is your attitude regarding the importance of preventive medicine? |  |  |  |  |  |  |
| 7. In your opinion, is it important that a physician personally maintains healthy behavior? |  |  |  |  |  |  |
| 8. Are you vigilant about doing regular physical activity (over 150 weekly hours)? |  |  |  |  |  |  |
| 9. Do you adhere to a guideline-based diet and eat at least 5 portions of vegetables and fruits a day? |  |  |  |  |  |  |
| 10. In your opinion, does the physician have a responsibility to prevent disease in his patient? |  |  |  |  |  |  |
| 11. What is your position regarding the prevention of cancer? |  |  |  |  |  |  |
| 12. What is your position regarding the importance of preventing CVD disease? |  |  |  |  |  |  |
| 13. In your opinion, what is the level of responsibility that a physician has as opposed to a patient in the prevention of disease? |  |  |  |  |  |  |
| 14.Would you refer your patient to a dietician for a guideline-based diet to prevent cardiovascular disease? |  |  |  |  |  |  |
| 15. Would you recommend participation in a group for smoking cessation to your patient (if the patient smokes)? |  |  |  |  |  |  |
| 16. To what extent are you vigilant in filling out risk factors that your patient has (in the pop-up window)? |  |  |  |  |  |  |
| 17. To what extent are you vigilant in performing screening tests recommended by the HMO among your patients? |  |  |  |  |  |  |
| 18. In the event there is no patient compliance to screening tests, is there initiative on your part as a resident to refer him for screening tests? |  |  |  |  |  |  |

**We would appreciate if you could relate to your clinical residency at the Family Medicine Clinic on the following subjects.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **0****Unable to assess** | **1****Not at all** | **2****Very little** | **3****Sufficient** | **4****To a great extent** |
| 1. Melanoma screening |  |  |  |  |  |
| 2. Screening test for breast cancer |  |  |  |  |  |
| 3. Screening test for prostate cancer |  |  |  |  |  |
| 4. Screening test for colorectal cancer |  |  |  |  |  |
| 5. Physical exam of heart and blood vessels |  |  |  |  |  |
| 6. Balance of risk factors for CVD diseases |  |  |  |  |  |

**How much clinical exposure did you have to the following during your residency?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **0****Unable to assess** | **1****Not at all** | **2****Very little** | **3****Sufficient** | **4****To a great extent** |
| 7. Lung cancer |  |  |  |  |  |
| 8. Breast cancer |  |  |  |  |  |
| 9. Melanoma |  |  |  |  |  |
| 10. Prostate cancer |  |  |  |  |  |
| 11. Uterine and ovarian cancer |  |  |  |  |  |
| 12. Colorectal cancer |  |  |  |  |  |
| 13. Leukemia |  |  |  |  |  |
| 14. Other |  |  |  |  |  |

**How much time was allotted in the study program for the following conditions during residency?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **0****Unable to assess** | **1****Not at all** | **2****Very little** | **3****Sufficient** | **4****To a great extent** |
| 15. Cancer prevention counselling  |  |  |  |  |  |
| 16**.** Cancer diagnosis |  |  |  |  |  |
| 17. Hospital treatment of cancer |  |  |  |  |  |
| 18. Clinic treatment of cancer |  |  |  |  |  |
| 19. Follow-up of cancer patient |  |  |  |  |  |
| 20. Time allotment including cancer prevention – initial detection and reduction of mortality |  |  |  |  |  |
| 21. Health promotion and cancer prevention |  |  |  |  |  |
| 22. Cancer risk factors |  |  |  |  |  |
| 23. Prevention of cardiovascular disease (CVD) |  |  |  |  |  |
| 24. CVD diagnosis |  |  |  |  |  |
| 25. Treatment for CVD patients at the hospital |  |  |  |  |  |
| 26. Treatment for CVD at the clinic |  |  |  |  |  |
| 27. Follow-up of CVD patients |  |  |  |  |  |
| 28. Time allotment including CVD prevention – initial detection and reduction of mortality |  |  |  |  |  |
| 29. Health promotion and CVD prevention |  |  |  |  |  |
| 30. CVD risk factors |  |  |  |  |  |

**We appreciate if you could asses how much residency in family medicine has contributed to you mastering the following subjects:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **0****Unable to assess** | **1****Not at all** | **2****Very little** | **3****Sufficient** | **To a great extent** |
| 31. Preventive medicine and health promotion in general |  |  |  |  |  |
| 32. Cardiovascular disease (CVD) in general |  |  |  |  |  |
| 33. Cancer of all types in particular |  |  |  |  |  |

**We appreciate if you could answer a number of socio-demographic questions (please fill out or circle your answer):**

34. Gender: a. male b. female

35. Year of birth: \_\_\_\_\_\_\_\_

36. Family status: a. unmarried b. married c. divorced d. widowed

37. Date of immigration: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

38. Years of experience as a physician: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

39. Where did you complete your medical studies:

40. Stage of residency: Year 1 2 3 4

41. Place of residency in family medicine:

42. Main practice: a. city b. rural c. city and rural

43. Do you smoke? a. yes b. no

44. If you answered yes, please note how many cigarettes a day: \_\_\_\_\_\_\_\_\_\_

45. Weight (kg): \_\_\_\_\_\_\_\_ Height (meter): \_\_\_\_\_\_\_\_\_\_\_

**Thank you for your cooperation!**