

# Health and Oral Health Coaching

Subjects: Dentistry, Oral Surgery & Medicine

Contributor: Theodoros Varzakas, Maria Antoniadou, Maria Antoniadou

Health-related behavior based on diet is an important determinant of oral health in independent elderly. Aging impairs senses, mastication, oral status, and function, causing nutritional needs and diet insufficiencies that contribute to a vicious circle of impairment. But the present needs of independent older adults suggest that health research and oral health care should shift from disease management and therapy to integral customized and personal treatment plans, including lifestyle, psychological, nutritional, and oral health coaching approaches. In this paper health coaching approaches in medical and dental settings are valued as to their effectiveness for older adults. Furthermore, coaching approaches for seniors are discussed and coaching models for better senior patient-dentist cooperation on the diet issue are suggested. Diet and oral health coaching is proven to be a modern senior patient-centered approach that needs to be incorporated at all relevant settings. It should aim to empower older adults in co-management of their oral diseases or bad diet habits affecting their oral health. This can be carried out through an incorporated educational plan for dentists either at the postgraduate or professional level since advantages seem to enhance the quality of life of the independent elderly.

Keywords: Oral health coaching ; Diet coaching ; elderly

## 1. Introduction

Older Adults (OA), living impaired circumstances, need customized repetitive and more motivational dietary interventions for general and oral health than younger individuals, in order to achieve desired changes in oral health and diet matters. Most of all, it takes support, compassion, and empathy for facilitating any coaching approach in these individuals. Those are characteristics at which senior health coaching should excel to be effective.

As said before, the health coach-coachee/patient relationship is “a goal-oriented, client-centered partnership that is health-focused and occurs through a process of client enlightenment and empowerment” <sup>[1]</sup>. So, certified health coaches or health care professionals doing health coaching are somewhat like “change agents”. They should understand how habits form, know how to reverse them, and specialize in helping people overcome obstacles in pursuing their goals. Their role thus involves listening, understanding, facilitating, applauding, supporting, motivating, providing feedback, rewarding, and helping the patient to weigh options and make choices. This can be accomplished by establishing trust and intimacy with the coachee/patient, active listening, powerful questioning, direct communication, creating awareness, designing action plans and goal setting with the coachee, and managing his/her progress and accountability <sup>[2]</sup>. In this process of change for the better, it is very important to identify and overcome challenges in the first place and then clarify the patient’s strengths and aspirations, listening to his/her concerns, boosting his/her confidence in their ability to change, and eventually collaborating with him/her on a plan for change.

Health coaching, in specific, guides a learning process for improved disease or diet management that, if successful, it should lead to permanent changes in patient self-management skills and behavior. But these changes in self-management skills and behavior take time to influence health outcomes <sup>[3]</sup>. Therefore, in general, the impact of health coaching on health care and cost effectiveness should be assessed in long-term follow-ups <sup>[4]</sup> for all age groups but even more for the OA due to the physical and mental alterations discussed above.

The problem in the relevant literature is that evidence on the effectiveness of health coaching is, so far, conflicting and it is based on studies for adults with short-term follow-up only (up to 24 months) <sup>[3][4][5][6][7][8]</sup>. Due to the heterogeneity of target populations and outcome measures, no systematic reviews with meta-analyses have been completed <sup>[9]</sup>. So far, individual studies show basically either small or no significant effects of health coaching interventions <sup>[3][10]</sup>. They usually include the key recommendations shown in [Table 1](#).

**Table 1.** Key recommendations for health coaching in OA.

Recommendations for OA during Health Coaching	
1	Know how and when to call for help
2	Learn about the condition and set goals
3	Take medicines/nutrients correctly
4	Get recommended tests and services
5	Act to keep the condition well controlled
6	Make lifestyle changes and reduce risks
7	Build on strengths and overcome obstacles
8	Follow-up with specialists and appointments

In many cases, self-management booklets are sent to patients to support progress toward the key recommendations <sup>[11]</sup>. Further, a traffic light system, telephone, or e-application can be used in order to visualize patients' progress and support <sup>[12][7][8][10][13][14][15][16][17][18][19][20]</sup>.

Other research data reinforce the controversial benefits from diet health coaching in OA. To date, most of the large-scale lifestyle modification randomized controlled trials (RCTs) aiming to achieve healthy weight and/or improve nutrition were conducted among non-cancer populations <sup>[5][21][22][23]</sup>. But, further, one should think that it is more interesting to evaluate the coaching effect especially on cancer patients. Since these patients are basically faced with the risk of death, they should be expected to be more willing to change habits. Generally, all cancer survivors are advised to adhere to the World Cancer Research Funds'/American Institute for Cancer Research (AICR) recommendations <sup>[24]</sup> to maintain a healthy weight, be physically active; eat a diet rich in fruits, vegetables, and whole grains; limit consumption of red and processed meats, sugar-sweetened beverages, fast foods high in fat, starches, or sugars, and alcohol; and do not rely on dietary supplements for cancer prevention. Additionally, it is recommended to abstain from smoking and reduce excess sun exposure. The American Cancer Society (ACS) guidelines for cancer survivors similarly aim to improve overall survival, metabolic health, and quality of life <sup>[25]</sup>. To one's great surprise, only a minority of cancer survivors meet the above ACS and AICR recommendations <sup>[26][27][28][29][30][31]</sup>. In a nationally representative survey among breast, prostate, and colorectal cancer survivors, only 16% to 18% consumed five or more servings per day of fruits and vegetables, and 24% to 43% engaged in 150 min or more per week of moderate to vigorous physical activity <sup>[29][32]</sup>. Also mentioned elsewhere, female breast cancer survivors are more likely than males to meet fruits and vegetables recommendations, while male cancer survivors are more likely than females to meet the physical recommendations <sup>[33]</sup>. Further, it seems that cancer survivors are more likely to adhere to recommendations either during cancer treatment or soon after completion of it <sup>[34]</sup>. A recent systematic review of lifestyle interventions among cancer survivors, including 51 studies, reported that cancer survivors' adherence to recommendations after participation in such studies is surprisingly low, at 23% on average (range, 7–40% <sup>[34]</sup>). The authors also reported that these interventions were more effective among survivors with diagnosis in the past five years or recent survivors compared with long-term survivors (>5 years). Finally, survivors were more likely to adhere to recommendations to not smoke or to reduce alcohol consumption, while they were less likely to meet the recommendation for dietary fiber consumption, something that future senior coaches should keep in mind, too.

Reasons for cancer survivors not following diet and physical activity recommendations include lack of knowledge, low self-efficacy, and motivational and structural barriers (i.e., lack of access to healthy food and exercise facilities) to achieving sustained change <sup>[35]</sup>. On the other hand, a study showed that 80% of breast and prostate cancer survivors stated they are motivated to make lifestyle modifications through nutrition and physical activity health promotion programs <sup>[27]</sup>. So, data on this specific issue are quite controversial. It seems that, although patients are often provided enough, if not extensive, knowledge on diet and nutrition in order to change their dietary behaviors, they have only limited success in changing them <sup>[35]</sup>. It is important to mention that, although initial changes may occur, these may not persist over the long term <sup>[36][37]</sup>. Everywhere in the literature it is highlighted that patient self-management is not always easy to accomplish. It is difficult to change a long-entrenched lifestyle, even when there is motivation to do so; however, it is much more difficult if there is no motivation. Psychosocial and financial factors are key barriers especially for OA. Many of them, usually quite independent during their lifespan, may be embarrassed about the need for help, lack resources to make changes, or may fear failure and the associated perception that they are incompetent. Of course, there has often not been a strong support system within the medical community to help OA to manage on their own nor in the community at large or even sometimes within the family. To address this gap, effective lifestyle modification programs at the clinics, dental units, and community centers and settings are needed to promote sustained behavior change for those individuals <sup>[6][10][38]</sup>.

## 2. Conclusions

It is thus important to conclude that, so far, adherence of this aging group to professional recommendations is astonishingly low. Of course, there always seems to be a gap between what people 'know' and what they 'do'. The process that maintains the gap between knowledge and behavior is ambivalence. OA are faced with conflicting motivations and pressures; the change feels too big, the rewards too distant, motives no longer exist, the personal or financial costs are too high, or maybe it was never their idea to change in the first place <sup>[39]</sup>. Studies on adherence to health professionals' recommendations have shown that approximately 30–60% of health information provided in the clinician–patient encounter is forgotten within an hour and that 50% of health recommendations are not followed <sup>[40]</sup>. Thus, overcoming persistent noncompliance of OA can make health-behavior change one of the most rewarding and the most challenging responsibilities for dental health professionals.

---

## References

1. Jeanette M. Olsen; Health Coaching: A Concept Analysis. *Nursing Forum* **2013**, 49, 18-29, [10.1111/nuf.12042](https://doi.org/10.1111/nuf.12042).
2. ICF. Available online: <https://coachfederation.org/> (accessed on 13 May 2020).
3. Kirsi Kivelä; Satu Elo; Helvi Kyngäs; Maria Kääriäinen; The effects of health coaching on adult patients with chronic diseases: A systematic review. *Patient Education and Counseling* **2014**, 97, 147-157, [10.1016/j.pec.2014.07.026](https://doi.org/10.1016/j.pec.2014.07.026).
4. Rachel Hale; Jeannie Giese; Cost-Effectiveness of Health Coaching. *Professional Case Management* **2017**, 22, 228-238, [10.1097/ncm.0000000000000223](https://doi.org/10.1097/ncm.0000000000000223).
5. Dennis, S.M.; Harris, M.; Lloyd, J.; Davies, G.P.; Faruqi, N.; Zwar, N. Do people with existing chronic conditions benefit from health coaching? A rapid review. *Aust. Health Rev.* 2013, 37, 381–388.
6. Park, Y.H.; Chang, H.; Kim, J.; Kwak, J.S. Patient-tailored self-management intervention for older adults with hypertension in a nursing home. *J. Clin. Nurs.* 2013, 22, 710–722.
7. Block, G.; Azar, K.M.; Romanelli, R.J.; Block, J.T.; Hopkins, D.; Carpenter, H.A.; Dolginsky, M.S.; Hudes, H.L.; Palaniappan, L. Diabetes prevention and weight loss with a fully automated behavioral intervention by email, web and mobile phone: A randomized controlled trial among persons with prediabetes. *J. Med. Internet Res* 2015, 17, e240.
8. Tiede, M.; Dwinger, S.; Herbart, L.; Härter, M.; Dirmaier, J. Long-term effectiveness of telephone-based health coaching for heart failure patients: A post-only randomized controlled trial. *J. Telemed. Telecare* 2017, 23, 716–724.
9. Kasey R. Boehmer; Suzette Barakat; SangWoo Ahn; Larry J. Prokop; Patricia J. Erwin; M. Hassan Murad; Health coaching interventions for persons with chronic conditions: a systematic review and meta-analysis protocol.. *Systematic Reviews* **2016**, 5, 146, [10.1186/s13643-016-0316-3](https://doi.org/10.1186/s13643-016-0316-3).
10. S. Dwinger; Jörg Dirmaier; Lutz Herbarth; Hans-Helmut König; Matthias Eckardt; Levente Kriston; I. Bermejo; Martin Härter; Telephone-based health coaching for chronically ill patients: study protocol for a randomized controlled trial. *Trials* **2013**, 14, 337-337, [10.1186/1745-6215-14-337](https://doi.org/10.1186/1745-6215-14-337).
11. World Cancer Research Fund/American Institute for Cancer Research. Diet, Nutrition, Physical Activity and Cancer: A Global Perspective. Continuous Update Project Expert Report; American Institute for Cancer Research: Washington, D C, USA, 2018
12. Martin Härter; Jörg Dirmaier; S. Dwinger; Levente Kriston; Lutz Herbarth; Elisabeth Siegmund-Schultze; Isaac Bermejo; Herbert Matschinger; Dirk Heider; Hans-Helmut König; et al. Effectiveness of Telephone-Based Health Coaching for Patients with Chronic Conditions: A Randomised Controlled Trial. *PLOS ONE* **2016**, 11, e0161269, [10.1371/journal.pone.0161269](https://doi.org/10.1371/journal.pone.0161269).
13. Fogg, J. *Persuasive Technology: Using Computers to Change What We Think and Do*; Morgan Kaufmann Publishers: San Francisco, CA, USA, 2003.
14. Leahy, T.M.; Wing, R.R. A randomized controlled pilot study testing three types of health coaches for obesity treatment: Professional, peer, and mentor. *Obes. Silver Spring* 2013, 21, 928–934.
15. Steventon, A.; Tunkel, S.; Blunt, I.; Bardsley, M. Effect of telephone health coaching (Birmingham OwnHealth) on hospital use and associated costs: Cohort study with matched controls. *BMJ* 2013, 347.
16. Morello, R.; Barker, A.; Watts, J.; Bohensky, M.; Forbes, A.; Stoelwinder, J. A telephone support program to reduce costs and hospital admissions for patients at risk of readmission: Lessons from an evaluation of a complex intervention. *Popul. Health Manag.* 2016, 19, 187–195.

17. Oksman, E.; Linna, M.; Hörhammer, I.; Lammintakanen, J.; Talja, M. Cost-effectiveness analysis for a tele-based health coaching program for chronic disease in primary care. *BMC Health Serv. Res.* 2017, 17, 138.
18. DeJesus, R.S.; Breitkopf, C.R.; Rutten, L.J.; Jacobson, D.J.; Wilson, P.M.; Sauver, J.S. Incidence rate of prediabetes progression to diabetes: Modeling an optimum target group for intervention. *Popul. Health Manag.* 2017, 20, 216–233.
19. Schmittiel, J.A.; Adams, R.A.; Goler, N.; Sanna, R.S.; Boccio, M.; Bellamy, D.J.; Brown, D.S.; Neugebauer, R.S.; Ferrara, A. The impact of telephonic wellness coaching on weight loss: A “natural experiments for translation in diabetes (NEXT-D)” study. *Obesity* 2017, 25, 352–356.
20. Mustonen, E.; Hörhammer, I.; Absetz, P.; Patja, K.; Lammintakanen, J.; Talja, M.; Kuronen, R.; Linna, M. Eight-year post-trial follow-up of health care and long-term care costs of tele-based health coaching. *Health Serv. Res.* 2020, 55, 211–217.
21. Howard, B.V.; Van Horn, L.; Hsia, J.; Manson, J.E.; Stefanick, M.L.; Kuller, L.H.; Langer, R.D.; Lasser, N.L.; Levis, C.E.; Margolis, K.L.; et al. Low-fat dietary pattern and risk of cardiovascular disease: The women’s health initiative randomized controlled dietary modification trial. *JAMA* 2006, 295, 655–666.
22. Knowler, W.; Fowler, S.; Hamman, R.; Christophi, C.; Hoffman, H.; Brenneman, A.; Brown-Friday, J.; Goldberg, R.; Venditti, E.; David, M.; et al. Diabetes prevention program research group. 10-year follow-up of diabetes incidence and weight loss in the diabetes prevention program outcomes study. *Lancet* 2009, 374, 1677–1686.
23. Wadden, T.A.; West, D.S.; Neiberg, R.H.; Wing, R.R.; Ryan, D.H.; Johnson, K.C.; Look AHEAD Research Group. One-year weight losses in the Look AHEAD study: Factors associated with success. *Obesity (Silver Spring)* 2009, 17, 713–722.
24. World Cancer Research Fund/American Institute for Cancer Research. Diet, Nutrition, Physical Activity and Cancer: A Global Perspective. Continuous Update Project Expert Report; American Institute for Cancer Research: Washington, DC, USA, 2018.
25. Cheryl L. Rock; Colleen Doyle; Wendy Demark-Wahnefried; Jeffrey Meyerhardt; Kerry S. Courneya; Anna L. Schwartz; Elisa V. Bandera; Kathryn K. Hamilton; Barbara Grant; Marji McCullough; et al. Nutrition and physical activity guidelines for cancer survivors. *CA: A Cancer Journal for Clinicians* **2012**, 62, 242–274, [10.3322/caac.21142](https://doi.org/10.3322/caac.21142).
26. McBride, C.M.; Clipp, E.; Peterson, B.L.; Lipkus, I.M.; Demark-Wahnefried, W. Psychological impact of diagnosis and risk reduction among cancer survivors. *Psychooncology* 2000, 9, 418–427.
27. Demark-Wahnefried, W.; Peterson, B.; McBride, C.; Lipkus, I.; Clipp, E. Current health behaviors and readiness to pursue life-style changes among men and women diagnosed with early stage prostate and breast carcinomas. *Cancer* 2000, 88, 674–684.
28. Coups, E.J.; Ostroff, J.S. A population-based estimate of the prevalence of behavioral risk factors among adult cancer survivors and noncancer controls. *Prev. Med.* 2005, 40, 702–711.
29. Blanchard, C.M.; Courneya, K.S.; Stein, K. American Cancer Society’s SCS-II. Cancer survivors’ adherence to lifestyle behavior recommendations and associations with health-related quality of life: Results from the American Cancer Society’s SCS-II. *J. Clin. Oncol.* 2008, 26, 2198–2204.
30. Kimmons, J.; Gillespie, G.; Seymour, J.; Serdula, M.; Blanck, H.M. Fruit and vegetable intake among adolescents and adults in the United States: Percentage meeting individualized recommendations. *Medscape. J. Med.* 2009, 11, 26.
31. Inoue-Choi, M.; Robien, K.; Lazovich, D. Adherence to the WCRF/AICR guidelines for cancer prevention is associated with lower mortality among older female cancer survivors. *Cancer Epidemiol. Biomarkers Prev.* 2013, 22, 792–802.
32. Keith M. Bellizzi; Julia H. Rowland; Diana D. Jeffery; Timothy McNeel; Health Behaviors of Cancer Survivors: Examining Opportunities for Cancer Control Intervention. *Journal of Clinical Oncology* **2005**, 23, 8884–8893, [10.1200/jco.2005.02.2343](https://doi.org/10.1200/jco.2005.02.2343).
33. Traci Lemasters; Sundareswaran S. Madhavan; Usha Sambamoorthi; Sobha Kurian; Health behaviors among breast, prostate, and colorectal cancer survivors: a US population-based case-control study, with comparisons by cancer type and gender.. *Journal of Cancer Survivorship* **2014**, 8, 336–48, [10.1007/s11764-014-0347-5](https://doi.org/10.1007/s11764-014-0347-5).
34. Tollosa Daniel N.; Meredith Tavener; Alexis Hure; Erica L James; Adherence to multiple health behaviours in cancer survivors: a systematic review and meta-analysis. *Journal of Cancer Survivorship* **2019**, 13, 327–343, [10.1007/s11764-019-00754-0](https://doi.org/10.1007/s11764-019-00754-0).
35. Koutoukidis D. A.; Sonia Lopes; Abigail Fisher; Kate Williams; Helen Croker; Rebecca J. Beeken; Lifestyle advice to cancer survivors: a qualitative study on the perspectives of health professionals. *BMJ Open* **2018**, 8, e020313, [10.1136/bmjopen-2017-020313](https://doi.org/10.1136/bmjopen-2017-020313).
36. Chlebowski, R.T.; Blackburn, G.L.; Thomson, C.A.; Nixon, D.W.; Shapiro, A.; Hoy, M.K.; Goodman, M.T.; Giuliano, A.E.; Karanja, N.; McAndrew, P.; et al. Dietary fat reduction and breast cancer outcome: Interim efficacy results from the Women’s Health Initiative Diet Modification Trial. *JAMA* 2012, 307, 1123–1132.

men's Intervention Nutrition Study. J. Natl. Cancer Inst. 2006, 98, 1767–1776.

37. Pierce, J.P.; Stefanick, M.L.; Flatt, S.W.; Natarajan, L.; Sternfeld, B.; Madlensky, L.; Parker, B.A.; Newman, V.A.; Rock, C.L.; Caan, B.; et al. Greater survival after breast cancer in physically active women with high vegetable-fruit intake regardless of obesity. J. Clin. Oncol. 2007, 25, 2345–2351.
38. Kim Miyong T.; Kim Byeng Kim; Tam H. Nguyen; Jisook Ko; Jim Zabora; Elizabeth Jacobs; David Levine; Motivating people to sustain healthy lifestyles using persuasive technology: A pilot study of Korean Americans with prediabetes and type 2 diabetes.. *Patient Education and Counseling* **2018**, 102, 709-717, [10.1016/j.pec.2018.10.021](https://doi.org/10.1016/j.pec.2018.10.021).
39. Djuric Z; Michelle Segar; Carissa Orizondo; Jeffrey Mann; Maya Faison; Nithin Peddireddy; Matthew Paletta; Amy Locke; Delivery of Health Coaching by Medical Assistants in Primary Care.. *The Journal of the American Board of Family Medicine* **2017**, 30, 362-370, [10.3122/jabfm.2017.03.160321](https://doi.org/10.3122/jabfm.2017.03.160321).
40. DiMatteo, M.R.; Giordani, P.J.; Lepper, H.S.; Croghan, T.W. Patient adherence and medical treatment outcomes: A meta-analysis. Med. Care 2002, 40, 794–811.

---

Retrieved from <https://encyclopedia.pub/entry/history/show/7094>