

Ten Keys to Health Aging

| Category | Description |
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| Title of intervention | The '10 Keys' to Healthy Aging Demonstration Project |
| Objectives | <p>Objectives IROHLA taxonomy</p> <ul style="list-style-type: none"> ✓ To inform and educate older adults and/or professionals ✓ To support behaviour change and maintenance <p>Short description of the objectives of the intervention</p> <p>An innovative outreach community-based prevention program to reduce multiple risk factors (10 keys for healthy aging) for common diseases, reducing overall disability, among pensioners in low income communities.</p> <p>The ten keys for healthy aging are:</p> <div data-bbox="573 678 1003 1214" style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">“10 Keys”™ to Healthy Aging</p> <ol style="list-style-type: none"> 1. Prevent bone loss and muscle weakness 2. Lower LDL cholesterol (<100 mg/dl) 3. Control systolic blood pressure (<120 mmHg) 4. Regulate diabetes (blood glucose <100 gm/dL) 5. Be physically active at least 2 ½ hours per week 6. Stop smoking 7. Maintain social contact at least once a week 8. Participate in cancer screening 9. Combat depression 10. Get regular immunizations </div> <p><i>(2012 - Center for Aging and Population Health, a Centers for Disease Control Prevention Research Center, Graduate School of Public Health, University of Pittsburgh)</i></p> |



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| Target groups | <ul style="list-style-type: none"> ✓ pensioners: 65-80 ✓ vulnerable groups <p>Short description of the target groups</p> <ul style="list-style-type: none"> • Pensioners living in a low-income community. • 389 men and woman aged 65 and above from McKeesport, Pennsylvania. McKeesport has a population of approximately 25.000 including more than 5.000 individuals aged 65 and older. |
| Problem analysis | <p>Scope of the problem</p> <p>Since many older individuals have multiple chronic diseases, preventive programs focusing on a single condition/disease may be less effective for reducing overall disability when compared with programs focusing on multiple chronic diseases. Multiple chronic diseases were the major contributors to disability in older adults.</p> <p>Consequences for individual and/or society</p> <p>More chronic diseases among older adults, especially pensioners. No risk reduction. Focusing on any single condition will probably be ineffective in reducing disability.</p> <p>Distribution of the problem</p> <p>This problem is most common at low-income, high-risk communities such as pensioners who sit often alone at home.</p> <p>Perception of target groups (of the problem)</p> <p>Although nondisabled older adults may perceive themselves as being healthy and at low risk, they are actually at high risk for major illnesses and disability on the basis of their age alone.</p> |
| <i>Short description of the modifiable determinants of older adults with respect to this intervention.</i> | <p>Modifiable determinants of older adults</p> <p>Important is motivation. The intervention can improve the adherence to prevention goals. They achieve this by skills development, self-monitoring and social support. Knowledge is thus also important.</p> |
| <i>Short description of the modifiable determinants of professionals.</i> | Not applicable |



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| Components of the intervention | <p>Components</p> <ul style="list-style-type: none"> ✓ individual counselling/coaching by professionals ✓ group sessions (training) by professionals <p>Description of components</p> <p>The intervention program was conducted by health counsellors recruited from the community with at least a bachelor-level training in health education. The “10 Keys”™ to Healthy Aging campaign uses risk factor assessment as a simple and useful tool to help individuals learn about their overall health.</p> <p>Patients were interviewed at home after informed consent was obtained and eligibility was confirmed. A clinical assessment at baseline assessed current health conditions along with current use of health preventive practices. An in-person, follow-up evaluation was conducted after 12 months, repeating the baseline assessments. This information was used to create an individualised summary of the initial level of adherence to prevention goals. The summary was named the Prevention in Practice Report (PIP).</p> <p>The Prevention In Practice (PIP) report has been designed to involve adults in learning about their personal risk factors and identifying keys that require action. The PIP report includes actions or steps that are necessary to improve or lower risk factors. After the initial evaluation each participant in the program met individually with a health counsellor from the University of Pittsburgh’s Prevention Programme. Potential strategies discussed included both lifestyle and medical intervention for maximum risk reduction. An action plan is developed after that. Subsequently, action plans were discussed and modified as necessary by the health counsellor and participant via telephone follow-ups or in-person visits conducted every 3 months to promote long-term adherence.</p> <p>An (online) educational course has been designed as well to include both classroom instruction and discussion to help the older adults learn about healthy aging to address the issues chosen for the action plan. These classes are taught in a small group by Certified Health Ambassadors. The course can be tailored in length to meet the needs of various organisations. Interested individuals must register for the course, which is scheduled at various locations. As a participant in the class, one have an opportunity to practice skills and learn about:</p> <ul style="list-style-type: none"> • the need for health educators • the importance of preventing disease and disability • the background of the Keys to Healthy Aging • the aging of America • information on each of the “10 Keys”™ |

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| | <ul style="list-style-type: none"> • how to complete a brief health assessment • your own risk factors ways to introduce the “10 Keys”™ to others |
| Approach | <p>Theoretical models used</p> <p>It is a solutogenic approach. It is based on the most up-to-date prevention guidelines available at the time of publication. The therapies and preventive strategies were based on published research and adapted for a community setting with input from professionals and community advisory groups. It’s an innovative community-based prevention program. Prevention goals were grouped into simple and clear health targets that provided a consistent health message across multiple common medical conditions. Then the corresponding risk factor prevention goals were defined and operationalised. The prevention goals were designated as the ‘10 keys to healthy ageing’.</p> <p>Didactics used</p> <p>Educational programme by community peers (Certified Health Ambassadors).</p> <p>The “10 Keys” to health ageing was developed in 2001 and was based on epidemiological, clinical, and laboratory studies of the major diseases associated with morbidity and mortality (see Cheng & Leiter, 2006; Chobanian et al., 2003; Fillit et al., 2002; Genuth et al., 2003; Hak et al., 2002; Kuller & Sutton-Tyrrell, 1999; Rimer, Orleans, Keintz, Cristinzio, & Fleisher, 1990; Smith, Cokkinides, & Eyre, 2005; U.S. Preventive Services Task Force, 2002).</p> <p>The “10 Keys” interventions recommended were based on efficacy data demonstrating the potential for decreasing disability, morbidity, or mortality. An RCT focused on the translation of these proven preventive approaches into the community. Because of strong prior efficacy the data they employed included no ‘untreated’ control group for the interventions . They focused instead on how best to implement ‘proven preventive approaches in ‘real-world’ settings. Support for the program was obtained from the local hospital, medical community, and voluntary health and social service agencies.</p> <p>Techniques used</p> <ul style="list-style-type: none"> • A personalised approach. Patients were interviewed at home after informed consent was obtained and eligibility was confirmed. An in-person, follow-up evaluation was conducted after 12 months. • Shared decision making was part of the action planning. • Education programme on the action points. |

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| | <p>Contexts The focus of the program was the community of McKeesport, Pennsylvania. The community represents an older, high-risk population.</p> <p>Stakeholders involved University of Pittsburgh, Pennsylvania and the community of Pennsylvania.</p> <p>Type of professionals involved Health counsellors from the community, hired and trained by the University of Pittsburgh's Preventions Research Center, with at least a bachelor-level training in health education, nutrition or exercise science with standardised training in research assessment methods and behaviour change techniques.</p> |
| Resources and qualifications | <p>Duration of the intervention The intervention time was about 30 to 45 minutes at baseline and 15 to 30 min at each of four quarterly follow-ups for a total of about 2hr intervention time or about 3.5 hr per participant over the course of a year.</p> <p>The time for the baseline evaluation was about 30 min at baseline and 15 to 30 min at each follow-up for a total of about 1.5 evaluation hours per person.</p> <p>Financial costs for the implementing organisation The program involved approximately 3-4 total evaluation and intervention contact hours per participant. This may be a cost-effective approach for stimulating preventive health services in the community as long as adequate quality medical services are available to provide the recommended pharmacologic treatment and testing.</p> <p>Financial costs for the target groups Minimal financial costs for the target group. They are volunteers.</p> <p>Required competencies of professionals At least a bachelor-level training in health education, nutrition or exercise science with standardised training in research assessment methods and behaviour change techniques. Additional health counsellor training in behaviour change methodology was provided.</p> |

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| Implementation | <p>Implementation strategy Recruiting participants (via media advertisements and community health promotion events), Health counsellor training in behaviour change methodology (by a university), collaboration with local medical staff and community groups, evaluations.</p> <p>Conditions for effective implementation Integration of the 10 Keys approach into programs of agencies such as the American Association of Retired People or managed care organisations is an important step. Other conditions are changing the paradigm of medical care to emphasize prevention and active life expectancy, especially in low-income, high-risk populations. Efforts to reach more individuals at high risk should remain a top priority.</p> <p>Stakeholders involved A university, a low-income, high-risk community, a Medicare Health Maintenance Organisation (or some other form of medical insurance),</p> |
| Transferability | <p>Training: the health counsellors in the community need training in behaviour change methodology by the university of Pittsburg, Center for Healthy Aging and Population Health.</p> <ul style="list-style-type: none"> • Modules at: http://www12.edc.gsph.pitt.edu/CHA_OAEP/ • Manual: http://www12.edc.gsph.pitt.edu/CHA_OAEP/documents/instructormanual_100413.pdf • Resource Guide: http://www12.edc.gsph.pitt.edu/CHA_OAEP/documents/ResourceGuide_062911.pdf |
| Evaluation | <p>Methods used The intervention is evaluated by the Center for Health Aging (CHA). This is a Centers for Disease Control and Prevention (CDC) research center. They did a community-based randomised trial and report a 24-month evaluation of the program. They enrolled older adults into a Brief Education and Counselling Intervention or a Brief Education and Counselling Intervention plus a physical activity. Outcomes were collected on 389 adults with a mean age of 73.9 years over 24 months.</p> |
| Effectiveness | <p>Main results Adherence to the 10 keys improves significantly. The program resulted in significant reductions in key risk factors, increases in immunisations and adherence to established prevention guidelines over 2 years. The project demonstrates that older adults in a lower income community can improve their adherence to prevention goals through an evidence-based education and counselling program.</p> <p>The participants successfully improved their adherence to the '10 keys' goals in areas such as controlling Systolic Blood</p> |

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| | <p>Pressure, decreasing LDL cholesterol, obtaining colonoscopy for cancer screening, BMD measurement as osteoporosis screening and influenza and pneumonia vaccinations.</p> <p>A major issue is how to reach the highest risk individuals, successfully implement proven preventive strategies and maintain long-term adherence and follow-up and provide proof of reduction of adverse health outcomes.</p> |
| <i>Key elements/components of the intervention that must stay intact in order to have an effective intervention</i> | <p>Key elements</p> <ul style="list-style-type: none"> • Use health counsellors who work in the community. It's important that such health counsellors be trained in both the measurement of the risk factors, as well as in behavioural skills and adherence methodologies. • Low cost • Evidence-based education • Community-based • The focus on multiple diseases and multiple risk factors • Comprehensiveness en efficiency • Prevention • Reducing overall risk |
| Level of evidence | ✓ Randomised clinical trials |
| Sector | Health sector |
| Country of development | USA |
| Provider | <p><i>Name:</i> Anne B. Newman <i>Organisation:</i> University of Pittsburgh, Pennsylvania <i>Type of organisation:</i> University <i>Post address:</i> Bellefield ave. Room 532, Pittsburgh, PA 15213 <i>E-mail:</i> newmana@edc.pitt.edu</p> <p><i>Name:</i> Joseph Robare <i>Organisation:</i> U.S. Department of Agriculture, Alexandria, VA, USA <i>E-mail:</i> Joseph.Robare@fns.usda.gov</p> <p>For more information about the intervention, contact Anne Newman. For more information about the evaluation and effects, contact Joseph Robare.</p> |



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| Relevant documents/links | <p>Relevant documents See links in Transferability section for instructor manual, modules and administrator resource guide, as well as: Journal of Aging and Health. The article I used for this format is an evaluation study. For this description format the original study is necessary. http://jah.sagepub.com/content/22/5/547.short</p> <p>Relevant links Center for Aging and Population Health, A Centers for Disease Control Prevention Research Center, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, Pennsylvania; 2015. Available from: http://www.caph.pitt.edu/programs/ http://www.cdc.gov/media/subtopic/matte/pdf/CDCHealthy-Aging.pdf http://www.napsnet.com/pdf_archive/104/70360.pdf http://clinicaltrials.gov/show/NCT01616433 https://www.fitstudio.com/articles/health-and-fitness-for-life-the-ten-keys-to-healthy-aging http://www12.edc.gsph.pitt.edu/CHA_OAEP/documents/ResourceGuide_062911.pdf</p> |

