

Key Principles of Evidence-based Vocational Rehabilitation in Adults with Cancer

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"Occupational Therapy and Rehabilitation"
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Special Thanks

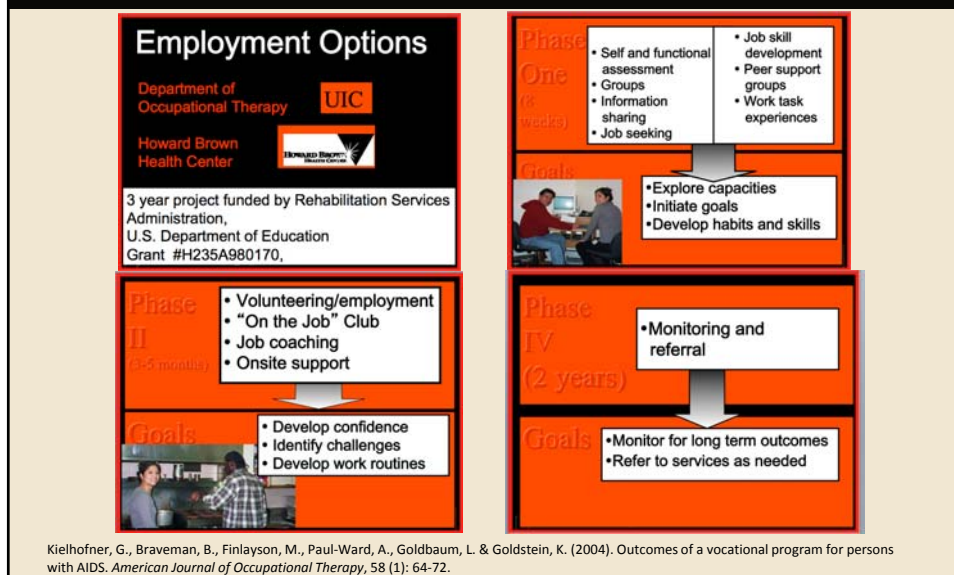
Thank you to the MD Anderson Cancer Center for their support in allowing me to attend this Congress

Thank you to Janet de Moor, PhD. MPH
Program Director
National Cancer Institute for contribution of slides 8, 10 & 14

Learning Objectives

- Understand key principles of evidence-based vocational rehabilitation for persons living with AIDS
- Describe the evidence on return-to-work for adults with cancer
- Explain the commonalities in effective evidence-based return-to-work interventions across conditions
- Explain the influence of an underlying condition, disease or disability on the return-to-work process.
- Explain occupational therapy's distinct value in evidence-based return-to-work programs

1990's AIDS and Return-to-Work



1990's AIDS and Return-to-Work

Subject Demographics N=129		
Incarcerated	17	13%
Domestic Violence Victim	12	9%
Substance Abuse History	57	44%
Mental Illness History	108	84%
Additional Physical Diagnosis	34	26%

Client Outcomes (N=89)		
Positive outcomes	60	67%
Working	50	56%
Volunteer or school	10	11%

Kielhofner, G., Braveman, B., Finlayson, M., Paul-Ward, A., Goldbaum, L. & Goldstein, K. (2004). Outcomes of a vocational program for persons with AIDS. *American Journal of Occupational Therapy*, 58 (1): 64-72.

Key Principles of the EO Program

- Multi-factoral program (person, environment, policy, disability)
 - Job satisfaction prior to illness
 - Illness severity
 - Supervisor/peer support
 - Positive narrative slope
 - Type of work (mildly)
 - Age
 - Education
 - Influence of policy on health care
 - Individualized occupational therapy and services (e.g. menu approach)

1990's: AIDS and Return-to-Work

Enabling Self Determination:
Outcomes of an Intervention to Increase Productivity in Persons Living with HIV/AIDS



Comparison of productive outcomes among participants in the ESD and standard care programs at 3, 6, and 9 months post intervention (n=45)

	ESD Program Participants with Productive Participation	Standard Care Participants with Productive Participation	Chi-Square Value	P-value*	Odds Ratio
3 months	20/28 (71.4%)	6/17 (35.3%)	5.66	.019	4.58
6 months	21/27 (77.8%)	5/18 (27.8%)	11.07	.001	9.10
9 months	18/25 (72.0%)	5/14 (35.7%)	4.88	.031	5.86

*1-tailed Fisher's Exact Test

Design

*compared 2 groups receiving ESD or standard care program

*Logistics ruled out a conventional randomized design and an interrupted times series design

*The most rigorous design that could be implemented for the study was a non-randomized two-group design (2 facilities served as the ESD sites and 2 as standard care sites)



Conclusion

* Many of the limitations also reflect the reality of conducting research in community settings

* The results of this study indicate that the participants in the ESD program:
 *were at least twice as likely to be productively engaged.
 *sustained productive engagement over time
 *had more intense productive engagement (i.e., most had more than 1 productive role)

Kielhofner, G., Braveman, B., Levin, M., & Fogg, L. (2008). A controlled study of services to enhance productive participation among persons with HIV/AIDS. *American Journal of Occupational Therapy*, 62 (1), 36-45.

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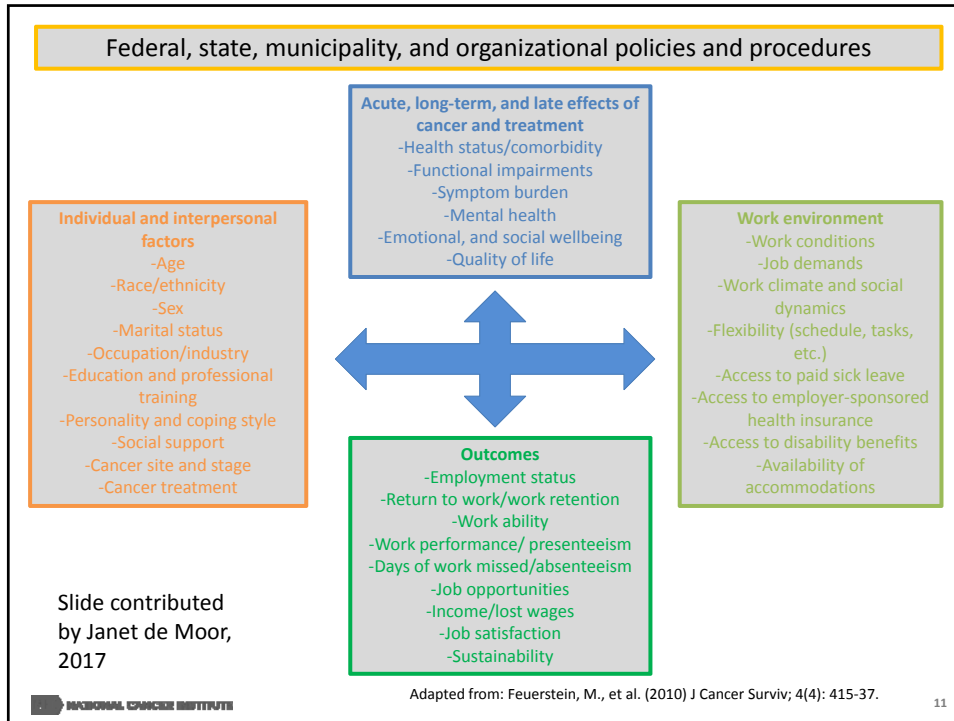
2017: Cancer and Return-to-Work

- Many cancer survivors report functional limitations and psychosocial difficulties that affect their ability to work.
- Approximately 64% of cancer survivors return to work at some point after diagnosis.³
- Rates of return to work range from 24%-94% depending on cancer type and stage at diagnosis.³
- Cancer survivors are 1.4 times more likely to be unemployed than individuals without a cancer history.⁴

Slide contributed by Janet de Moor, 2017

2017: Cancer and Return-to-Work

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Systematic Reviews

European Journal of Cancer Care

Feature and review paper

Predictors of return to work and employment in cancer survivors: a systematic review

P. VAN MUIJEN, MD, Department of Public and Occupational Health, EMGO+ Institute/VU University Medical Center, Amsterdam, Dutch Workers Insurance Authority, Amsterdam, and Research Center for Insurance Medicine, Amsterdam, N.I.E.C. WEEVERS, MD, Dutch Workers Insurance Authority, Amsterdam, I.A.K. SNELS, MD, PhD, Dutch Workers Insurance Authority, Amsterdam, S.F.A. DUJITS, PhD, Department of Public and Occupational Health, EMGO+ Institute/VU University Medical Center, Amsterdam, and Research Center for Insurance Medicine, Amsterdam, D.J. BRUINVELS, MD, PhD, Department of Public and Occupational Health, EMGO+ Institute/VU University Medical Center, Amsterdam, and Research Center for Insurance Medicine, Amsterdam, A.J.M. SCHELLART, PhD, MSc, Department of Public and Occupational Health, EMGO+ Institute/VU University Medical Center, Amsterdam, Dutch Workers Insurance Authority, Amsterdam, and Research Center for Insurance Medicine, Amsterdam, & A.J. VAN DER BEEK, PhD, Department of Public and Occupational Health, EMGO+ Institute/VU University Medical Center, Amsterdam, and Research Center for Insurance Medicine, Amsterdam, the Netherlands

VAN MUIJEN P., WEEVERS N.I.E.C., SNELS I.A.K., DUJITS S.F.A., BRUINVELS D.J., SCHELLART A.J.M. & VAN DER BEEK A.J. (2013) European Journal of Cancer Care 22, 144–160
 Predictors of return to work and employment in cancer survivors: a systematic review

Systematic Reviews

Interventions to enhance return-to-work for cancer patients (Review)

de Boer AGEM, Taskila T, Tamminga SJ, Frings-Dresen MHW, Feuerstein M, Verbeek JH



Qualitative Meta-Synthesis

J Cancer Surviv (2014) 8:657-670
DOI 10.1007/s11764-014-0377-z

REVIEW

Qualitative meta-synthesis of survivors' work experiences and the development of strategies to facilitate return to work

Mary Stergiou-Kita • Alisa Grigorovich •
Viefrine Tseung • Elizabeth Milosevic • Debbie Hebert •
Stephanie Phan • Jennifer Jones

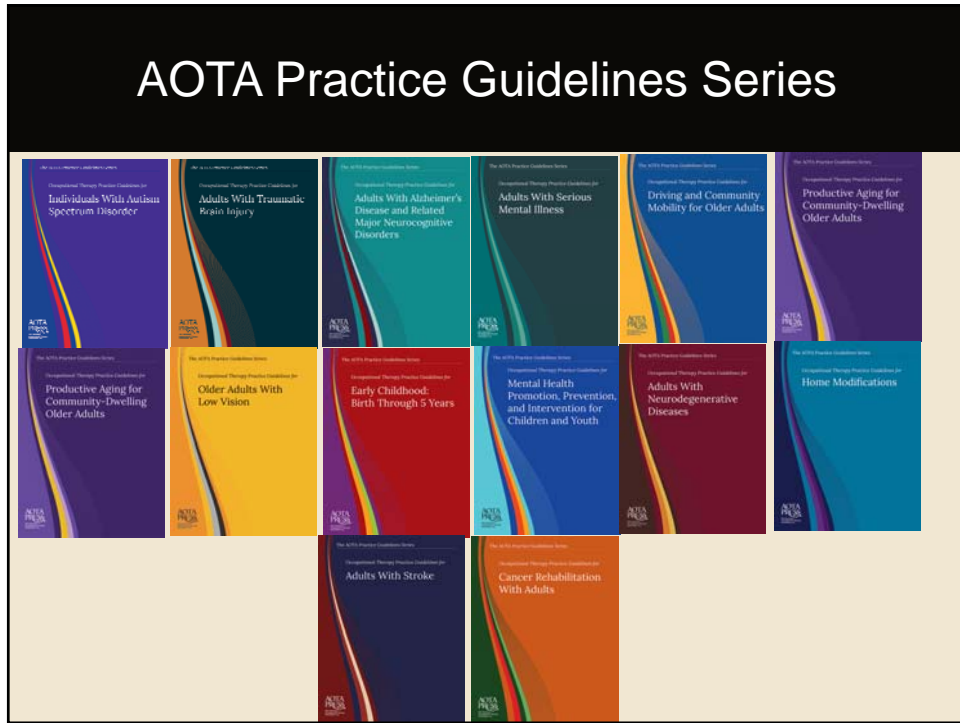
Characteristics of the Intervention Literature

- Generally low quality evidence
- Few interventions conducted in the United States
- Sample sizes are small with many studies conducted with breast cancer survivors
- Most studies lack sufficient detail needed to assess bias—which is a barrier to systematic reviews/meta-analyses
- Limited internal and external validity
- Employment is not well characterized in most survivorship interventions that address physical and psychosocial functioning
- Although there is evidence that multi-disciplinary interventions are most effective, the individual components are rarely evaluated separately

Slide contributed by Janet de Moor, 2017

(Fill in the blank) and Return-to-Work

- Does the specific condition, illness or disability change the parameters of best-practice, evidence-based vocational rehabilitation?
- Of course but....



Practice Guideline Team

- AOTA: Marian Arbesman, PhD, OTR/L and Deborah Lieberman, MHSA, OTR/L, FAOTA
- Systematic Review: Mariana D'Amico, EdD, OTR/L, FAOTA, Nova Southeastern University, Robert Gibson, PhD, MOTR/L, FAOTA, Medical College of Georgia, and Devera W. Kastner, MSLS, Medical Librarian, Alumni Library, Case Western Reserve
- Clinical Consultants: Claudine Campbell, MOT, OTR/L, CLT- Memorial Sloan Kettering Cancer Center and Lauro Munoz, OTR, MOT, CHC- MD Anderson Cancer Center, Jennifer Nicholson, OTR, MOT, Courtland Lee, OTR, MOT

Return to Work-3 articles

- Level I (2), Level III (1)
- Strong evidence that multidisciplinary interventions benefit the return to work experience of cancer survivors
- Moderate evidence that rehabilitation interventions can help survivors continue to work during and after cancer treatment.

Intervention Examples- Return to Work

- (de Boer, et al., 2011)-Systematic review of interventions geared toward RTW for cancer patients.⁴
 - Fourteen RCT. These studies involved a total of 1652 participants. Moderate quality evidence showed that employed patients with cancer experience return-to-work benefits from multidisciplinary interventions compared to care as usual.
- (Thijs, et al., 2012) 18-weeks rehabilitation program including strength and interval training, and home-based activities vs standard care.⁵
 - Patients in the intervention group showed significantly less reduction in working hours per week. No significant difference in time until return-to-work

Occupational Therapy's Distinct Value in Return-to-Work Programs

- Occupational therapy practitioners are uniquely qualified to assess the impact of the full variety of variables shown to influence return-to-work and intervene to-
 - Decrease the negative impact
 - Alter occupational demands by
 - Changing the task
 - Using adaptive strategies
 - Use compensatory and rehabilitative strategies to affect occupational performance

Conclusions

- Effective evidence-based return-to-work programs address the same influencing factors regardless of illness, condition or disability
- We need not reinvent the wheel each time we explore return-to-work with a new illness, condition or disability
- Occupational therapy practitioners are uniquely qualified to provide effective evidence-based return-to-work interventions as part of an interprofessional team

References

1. Kielhofner, G., Braveman, B., Finlayson, M., Paul-Ward, A., Goldbaum, L. & Goldstein, K. (2004). Outcomes of a vocational program for persons with AIDS. *American Journal of Occupational Therapy*, 58 (1): 64-72.
2. Kielhofner, G., Braveman, B., Levin, M., & Fogg, L. (2008). A controlled study of services to enhance productive participation among persons with HIV/AIDS. *American Journal of Occupational Therapy*, 62 (1), 36-45.
3. Mehnert A. Employment and work-related issues in cancer survivors. *Crit Rev Oncol Hematol*. 2011;77(2):109-30.
4. de Boer AG, Taskila T, Ojajarvi A, van Dijk FJ, Verbeek JH. Cancer survivors and unemployment: a meta-analysis and meta-regression. *JAMA*. 2009;301(7):753-62.
5. Thijs, K.M., de Boer, A.G.E.M., Vreugdenhil, G., van de Wouw, A.J., Houterman, S., Schep, G. (2012). Rehabilitation using high-intensity physical training and long-term return-to-work in cancer survivors. *Journal of Occupational Rehabilitation*, 22, 220-229. DOI: 10.1007/s10926-011-9341-1

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