DE-PRESCRIBING DEPRESSION IN THE ELDERLY

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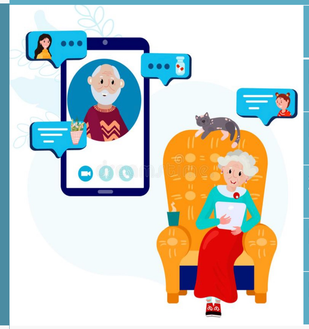
BACKGROUND

The geriatric population growing across the world. As screening and awareness for mental health increases, there is now more attention to treatment for illnesses such as depression and subsyndromal depression, which include depressive symptoms without meeting the full criteria for diagnosis. Depression is as high as 20% in the geriatric population, and even higher as it is likely underdiagnosed.

Is there evidence for nonpharmacologic interventions to treat depression in the elderly?



METHODS

Literature search 2005-2020

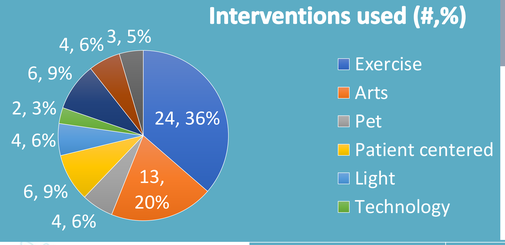
SOURCES: Cochrane Library, PsycInfo, CINAHL, Pubmed, Scopus and Web of Science

KEYWORDS: Depression, elderly, nursing home, long term care, nonpharmacological, recreation

INCLUSION: Primary and secondary outcomes that measured depression using evidence-based screening mechanisms:
- Geriatric Depression Scale
- PHQ-9
- Cornell Depression Scale.

EXCLUSION: all reviews, meta-analyses and systemic reviews, English language
212 publications → 63 met criteria

RESULTS



	Effective	%
Exercise	18 (N=24)	72%
Listening to music	9	100%
Singing	2	0%
Painting and art	2 (N=3)	66%
Pet therapy	3 (N=4)	75%

36%

Exercise - most studied intervention

72%

Of exercise effective: aerobic, aquatic (higher benefit in group aquatic)

Less effective: resistance band training, high cost equipment (wheel chair biking)

Listening to music

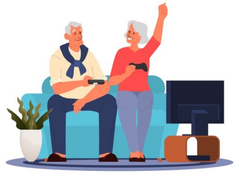
100%

effective

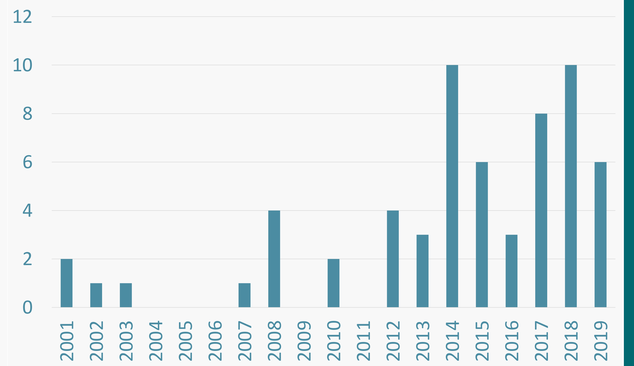
Singing

0%

effective



Number of publications by year



DISCUSSION

Exercise; self or group, aerobic or aquatic
Is an effective way of reducing depression scores with the largest sample size.

Creative arts shows mixed results, listening to music is most consistently effective. Mixed results with painting, art while the act of singing has no improvement at all.

There is a rising number of studies looking at personalized or patient centered approaches that include mindfulness and memory training; share stories to nursing staff, family, younger children as part of intergenerational interactions. Some association with sense of self worth and purpose when participating in intergenerational relationships. May contribute to decreased depression scores.

Use of technology is on the rise. Video conferencing with family showed decreased scores of loneliness but NOT depression scores.

Video games have some effectiveness in improving cognition and indirectly improve ability to advance cognitive therapy for depression.

FUTURE CONSIDERATIONS

There is increasing interest in nonpharmacological interventions for treatment of geriatric mental health disorders.
Potential areas of research:
- **Technology**: Use of virtual assistants for increased interaction and digital media interventions to improve cognition improving ability to process cognitive therapies for depression
- **Increase telepsychiatric services**: more frequent and higher rate of care for subsyndromal patients.
- **Prevention**: Long term studies at behavioral training and counseling as routine primary care prior to onset of dementia to reduce progression and ability to cope once
- **Health policy**: Currently reimbursement for screening of depression. Change at the policy level to increase payment and reimbursement of nonpharmacological treatment plans such as exercise, music and arts.

LIMITATIONS

Many prospective trials **small** and limited due to **loss of follow up** from natural cause or complications of comorbid conditions
- Most studies are small sample sizes, long term care facilities
- No large scale, community, prospective studies
- Meta analyses and reviews attempting to control for variables among **different experimental designs** show promising data but difficulty to scale
- Large scale prospective data may be limited due to difficulty of follow up over span of decades, limited mobility of patients and most are home or facility bound, segmented pool.

CONCLUSIONS

Overall, trends for **non-pharmacological** management of depression in the elderly are leading towards a **personalized** approach that integrates **exercise**, **arts** and methods to minimize cognitive decline. Areas of research should be made into incorporating technology and how that may better improve cognition, via computer programs or video games. There is strong evidence that ties one's ability to accept and use skills to cope with depression with a higher level of cognition. Once cognitively impaired, more focus should be made on sensory stimulation and passive means such as music, exercise and light therapy. In parallel, there is work to be done to **support primary care** providers in recognizing and **treating subsyndromal depression** while **driving policy change** to allow for adequate payment models that will further enhance patient care.