

Background

Language plays a central role in conversations about death-related issues. Words used reflect both our thoughts and feelings. How people choose to describe topics like death, Palliative-Care (PC), Advance-Care-Planning (ACP), and Voluntary-Assisted-Dying (VAD), and the linguistic sentiment of words used, can provide useful knowledge to inform health policies.

A Massive-Open-Online-Course (MOOC) about death (Dying2Learn) was offered through 2016-2020 for the public. An activity of the 2016-2017 MOOC asked participants to choose three-words describing personal feelings about death, and three-words describing how they think others feel about death. Sentiment analyses of these words showed sadness dominated emotional responses to death, but that words chosen to represent the feelings of others about death had more negative sentiment than words chosen for oneself [1]. At the end of the 2018 MOOC, this activity was expanded, with participants asked to nominate three-words that describe how they feel about PC, ACP, and VAD.

Aim

This study aimed to build on earlier work [1] regarding words used to describe feelings about death, to examine words used to describe PC, ACP, and VAD, and determine the sentiment valence, arousal, and dominance of words provided on these important topics.

Methods

Ethical approval was received for research use of de-identified MOOC content (Flinders Uni SBREC 7247). In 2018, $n=455$ respondents participated in the 'three-words' activity on PC, ACP, and VAD (93% female, mean age of 51 years). We examined word frequency and then applied Warriner et al.'s [2] sentiment lexicon to words nominated, providing sentiment indicators of valence ('sad' to happy/pleasant'), arousal ('calm' to 'exciting/arousing'), and dominance ('submissive/uncontrolled' to 'strong/in-control') inherent in words chosen to describe feelings about each topic. Scores could range from 0 to 9.

Results

High-frequency words used to describe feelings about PC were "comfort" and "caring"; for ACP they were "important" and "necessary"; and for VAD they were "choice" and "dignity". Analysing the mean scores on valence, arousal and dominance dimensions of sentiment demonstrated significant differences on sentiment for these 3 concepts. Words participants chose to express their feelings about PC were significantly more pleasant and less arousing than words chosen for ACP and VAD. All 3 concepts were represented by words high in dominant sentiment, but this level of dominant/in-control sentiment was significantly lower for VAD than for PC and ACP. Effect sizes were moderate to large (all $p < .01$).

High-Frequency Words

Palliativ
Care



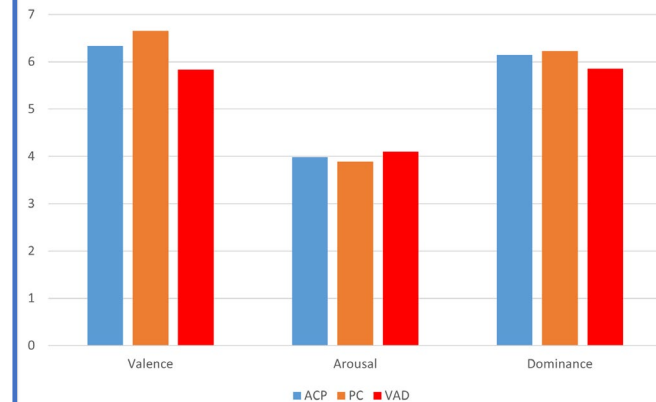
Advance
Care
Planning



Voluntar
Assisted
Dying



Sentiment Mean Scores



Conclusions

The variations in frequently-used words for PC, ACP, and VAD and their sentiment suggested that in this self-selected sample of MOOC participants, there were different understandings of the value and contribution of each concept. Words used to describe palliative care had more positive sentiment than words used to describe ACP and VAD: words for palliative care were more pleasant, calming, and stronger/in-control, perhaps suggestive of the reassuring nature of palliative care. Sentiment analysis of words to describe these important topics was able to usefully extend our understanding of community attitudes on areas of significant policy interest within palliative care.

References

- [1] Miller-Lewis, L.R., Lewis, T.W., Tieman, J., Rawlings, D., Parker, D., & Sanderson, C.R. (2021). Words describing feelings about death: A comparison of sentiment for self and others and changes over time. *PLoS ONE*, 16(1), e0242848.
- [2] Warriner A.B., Kuperman, V., & Brysbaert, M. (2013). Norms of valence, arousal, and dominance for 13,915 English lemmas. *Behavior Research Methods*, 45(4), 1191-207.

Finding out more

Visit website: www.caresearch.com.au/dying2learn
 Twitter: @dying2learn
 Ask Lauren Miller-Lewis: l.miller-lewis@cqu.edu.au
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