

# Does workforce matter? Examining the relationship between workforce characteristics and client treatment outcomes in the alcohol and other drug (AOD) field

Katinka van de Ven<sup>1</sup>, Alison Ritter<sup>1</sup>, & Ann Roche<sup>2</sup>

## Background

- While there is a long-standing and commonly held belief that the characteristics of the alcohol and other drug (AOD) workforce can impact client treatment outcomes, the available literature to date has not been systematically reviewed.
- The demand for evidence of 'what works' in relation to AOD staffing and treatment optimisation is growing, and it is therefore critical to synthesise relevant research in this field.
- A systematic review was undertaken to locate peer-reviewed research articles to develop a better understanding of the relationship between workforce characteristics and client treatment outcomes.

## Methods

### Search strategy:

A systematic review following the PRISMA search guidelines was undertaken for research papers which included:

- Workforce characteristics:** 1) years of clinical experience; 2) level of education/qualifications; 3) staff turnover; 4) staff-to-client ratio, and/or; 5) professional development (incl. clinical supervision and training).
- AOD treatment outcomes:** 1) changes in AOD use and related harms after treatment; 2) changes in psychological well-being; 3) retention in treatment; and 4) treatment completion.
- Other inclusion criteria:** 1) AOD specialist workforce only; and 2) in the English language.

### Quality assessment:

- The methodological quality of each included study was assessed using the Cochrane Risk of Bias Tool as a guideline.

## The Difference is Research

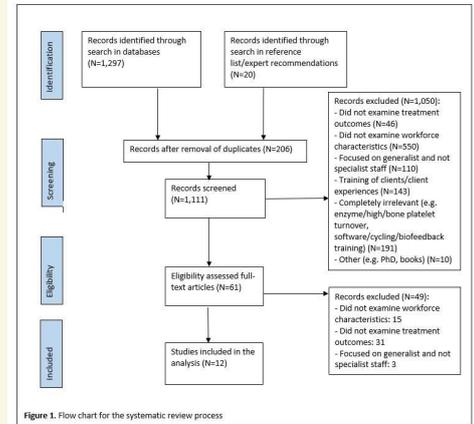


Figure 1. Flow chart for the systematic review process

## Results

Author(s)/ Year	Workforce Characteristics	Treatment Outcomes	Treatment Type
1. De Leon et al. 2000.	Years of experience	Client retention	Therapeutic community
2. Florentine & Anglin. 1997.	Staff-to-client ratio	AOD use	Outpatient counselling
3. Garner et al. 2012.	Staff turnover (organisational level)	AOD use & and related harms after treatment	Community Reinforcement Approach
4. Garner et al. 2013.	Staff turnover (client level)	AOD use & and related harms after treatment	Community Reinforcement Approach
5. Gaume et al. 2014	Years of experience	Alcohol use	Motivational interviewing
6. Hser et al. 2001.	Staff-to-client ratio & level of education	Client retention	Residential; outpatient drug-free programs; & OST
7. McCaughrin & Price. 1992.	Staff-to-client ratio	AOD use	Outpatient drug free treatment
8. Miller et al. 1980.	Years of experience	Alcohol use	Cognitive Behavioural interventions
9. Project MATCH. 1998.	Level of education & years of experience	AOD use	CBT; MET; & TSF
10. Sanchez-Craig et al. 1991.	Years of experience	Alcohol use	Motivational interviewing & other brief interventions
11. Schulte et al. 2010.	Years of experience & training	Client retention	OST & counselling
12. Woodward et al. 2006.	Staff-to-client ratio & level of education	Client retention	Residential; OST; & outpatient drug free

	Years of Experience (longer)	Qualifications (level of education; higher)	Turnover (less)	Staff-to-client ratios (higher; i.e. lower caseload)	Professional development (more)
Not significant	8, 9 & 11	6 & 9	3 & 4	2, 6 & 12	11
Significant (positive)	1, 5 & 10	12	-	6 & 7	-
Significant (negative)	9	9	3	-	-

### Methodological quality of studies:

Red = Low quality  
Yellow = Moderate quality  
Green = High quality

## Results: Key Findings

- Lack of empirical evidence:** Of the 61 assessed studies we often encountered claims that certain workforce characteristics influenced AOD treatment outcomes, but no empirical evidence was provided. Only 12 directly examined this relationship between the two variables. This, on its own, is an important finding and reveals a large gap in the literature.
- Methodological quality:** Most included studies were of low (42%) or moderate (25%) quality, with only 33% being of high quality.
- Mixed outcomes:** Workforce characteristics influence treatment outcome in multiple directions, making it difficult to interpret and generalise the findings.

## Discussion

- No clear unidirectional relationship:** The same workforce characteristic (e.g. level of education) can impact client outcomes in different directions (positive, negative and/or no relationship). This may be the result of: 1) not all client outcomes being equally affected; 2) dependent on the type of client being treated; and 3) influenced by the type of treatment being provided.
- Compounding/intervening variables:** In most studies, the potential interactions and compounding effects (e.g. effect of burnout) across different workforce characteristics were not addressed. Much greater clarity regarding the theoretical relationships between workforce and treatment outcome, and more sophisticated study designs and analyses, are therefore required.

## Conclusion

- This review provides the first synthesised effort to examine workforce characteristics and their relation to client treatment outcomes in alcohol and other drug settings.
- It highlighted the limited nature of research conducted in this area, which makes it difficult to draw conclusions in relation to the impact of workforce characteristics on treatment outcomes of alcohol and other drug clients.
- There are various limitations in the evidence base due to the small numbers of studies conducted and the numerous design and methodological issues.
- The present findings are important in helping to advance research in this area, and by providing a useful starting point for future studies.
- Expanding our knowledge of this may not only improve the AOD workforce but more importantly the quality and effectiveness of AOD treatment.

## References

Please email Dr Katinka van de Ven if you would like to see the full reference list.