



Eating & Drinking

Exploring the Relationship Between Alcohol Use & Disordered Eating

Dr Jacinta Tan and Gemma Johns

Aneurin Bevan University Health Board (Previously at Swansea University Medical School)

The Research Project

- Research conducted at Swansea University Medical School
- Obtained ethical approval (RESC number: 2018-0019).
- Commissioned by Alcohol Change UK
- Supported by staff at:
 - *Alcohol Change UK*
 - *Barod (Drug & Alcohol Charity in Swansea)*
 - *TED (Staff in Focus Group)*
 - *Drink Wise Age Wise (Richard Broadway)*
 - *Beat (UK leading Eating Disorder Charity)*



Background



- Alcohol dependency/misuse are characterised as ‘drinking excessively’ beyond recommendations based on consumption units.
- Unhealthy or disordered eating is defined as irregular or abnormal eating behaviours which can involve eating too much or too little, based on health recommendations.
- These types of behaviours can singlehandedly threaten a person’s social wellbeing, health and even life.
- But a co-occurring relationship between the two can significantly increase a person’s risk for serious complications.
- Research has looked at at-risk populations such as students at risk of both, but little has explored people currently seeking help for either alcohol misuse or disordered eating.

Research Aims

- To develop a better understanding of alcohol misuse/dependency and eating disorders/disordered eating behaviours
- Explore links and relationships between the two.
- Capture a range of narratives from the perspective of:
 - 1) People currently (or in the past) with alcohol misuse/dependency
 - 2) People currently (or in the past) with eating disorders/disordered eating behaviours
 - 3) People working or supporting people within alcohol misuse or eating disorder services

Methodology

A mixed methods approach using both quantitative and qualitative data collection using three separate methods including:

- A small exploratory study using a routine clinical database;
- Focus group discussions;
- Two online surveys.



Data Collection Method 1: SAIL Databank

- Explored patterns found in routine clinical data with the Anonymised Information Linkage (SAIL) Databank, a population database based at Swansea University.
 - Looked at associations between alcohol misuse and any form of diagnoses of disordered eating or eating behaviours;
 - Looked the prevalence of alcohol use and of eating disorders;
 - Looked at relationships between the two, using control cohorts.

Findings in SAIL Databank

READ	Description	Odds ratio (95% CI)
E%	Mental disorders	4.29 (3.98 - 4.61)
E1%	Non-organic psychoses	5.34 (4.38 - 6.45)
E11%	Affective psychoses	4.80 (3.81 - 5.96)
E112.	Single major depressive episode	5.95 (4.41 - 7.85)
E2%	Neurotic, personality and other n	3.83 (3.52 - 4.16)
E20%	Neurotic disorders	3.50 (3.15 - 3.87)
E200.	Anxiety states	3.86 (3.17 - 4.65)
E2001	Panic disorder	2.65 (1.95 - 3.51)
E2003	Anxiety with depression	4.35 (3.70 - 5.09)
E204.	Neurotic depression reactive type	3.20 (2.53 - 3.97)
E205.	Neurasthenia - nervous debility	1.73 (1.19 - 2.41)
E21%	Personality disorders	17.11 (11.93 - 23.86)
E23%	Alcohol dependence syndrome	7.23 (5.09 - 9.96)
E23..	Alcohol dependence syndrome	7.58 (5.24 - 10.59)
E24%	Drug dependence	4.37 (2.82 - 6.44)
E25%	Nondependent abuse of drugs	4.46 (3.12 - 6.17)
E27%	Psychogenic syndromes NEC	2.15 (1.60 - 2.81)
E2781	Tension headache	1.64 (1.08 - 2.37)
E28%	Acute reaction to stress	2.64 (1.61 - 4.04)
E29%	Adjustment reaction	2.74 (1.70 - 4.16)
E2B%	Depressive disorder NEC	4.74 (3.94 - 5.66)
E2B..	Depressive disorder NEC	4.21 (3.43 - 5.09)
E2B1.	Chronic depression	13.57 (8.62 - 20.37)

Eu%	[X]Mental and behavioural disorder	4.57 (4.06 - 5.12)
Eu3%	[X]Mood - affective disorders	4.42 (3.84 - 5.06)
Eu32.	[X]Depressive episode	4.29 (3.23 - 5.57)
Eu32z	[X]Depressive episode, unspecified	4.17 (3.46 - 4.98)
Eu4%	[X]Neurotic/stress/somatof dis	5.34 (4.26 - 6.60)
Eu42.	[X]Obsessive - compulsive disorder	11.57 (7.05 - 17.93)

Using an odds ratio calculation of an eating disorder (ED) cohort versus controls.

Matched for age and sex for all the other mental health diagnoses.

A clear correlation between ED and alcohol dependency.

Alcohol dependence has a very high OR.

Meaning that people with ED significantly more likely to also have another diagnosis involving alcohol dependence.

Data Collection Method 2:

Focus Groups

- Recruited participants from third sector agencies which support people who have alcohol issues.
- Recruitment and provision of facilities were kindly provided by Barod
- Focus groups were run with people who have significantly misused alcohol (and substances), and some members of staff who support them.
- Three focus groups (21 participants in total), all audio-recorded, transcribed and analysed using NVIVO and a manual approach.
- Discussions included how participants drinking (and other substances) related behaviours affects their eating behaviours (now or in the past).

Themes from Focus Groups



Theme 1: No matter the level of severity or stage a person's alcohol misuse, the importance of food and nutrition was relegated to a 'secondary' priority for a variety of reasons.



Theme 2: 'Forming a healthy relationship with food' was embodied with the concept of 'love, care and pleasure' associated with good and caring relationships as opposed to the solitary and isolated relationship with alcohol.



Theme 3: Concern about the 'alcohol wheel' as triggering those more susceptible to an eating disorder in alcohol services.

Theme 1: Food Secondary to Alcohol

- The importance of food was often considered secondary or deemed less important to alcohol.
- Regardless of severity or stage of alcohol use/misuse was at, how or why this occurred varied between people.
- Some people described how they just didn't need or want the food, others said they tended to opt for convenient (and less nutritious) meals in order to fuel their bodies (e.g., fast, convenient processed food).

Theme 2 Sub-Theme 1: Forming a Healthy Relationship With Food

- The relationship people who are dependent on alcohol have with food.
- How relationships with food are often dependent on other relationships people have in their daily lives.
- When food was prepared with love and care from somebody else tended to produce a different type of pleasure beyond that of the typical eating for the purpose of fuelling the body, or purely convenience.
- When participants were asked, ‘what would be helpful?’ in relation to eating better, the responses associated feeding with feeling worthy and cared for, and a having a nurturing relationship with people.

Sub-Theme 2: Preparation and Rituals

- The ‘preparation’ of any type of ritual (or addiction) was reported by participants to play a significant part in its permanent structure in people’s daily lives.
- For example, a person in early recovery for alcohol dependency described how the ‘preparation’ of his alcohol purchases had more significance in his addiction and ritual than then drinking itself.
- From the perspective of people who have recovered from alcohol use (or other substances) they found that adopting a new routine or daily preparation can help fill an unhealthy void – which is about building a new and healthy relationship with food.

Theme 3: The 'Alcohol Wheel' and ED Risk

- Initiatives made by one service (e.g., alcohol support services) may impact on other problems (e.g., poor eating behaviours and choices, or eating disorders).
- Members of staff described a 'drinking wheel', which was designed with the intention of motivating people to drink less if they understood how many calories they consumed if they binge drink.
- However, this approach may perversely disincentivise people dependent on alcohol from consuming a balanced and healthy diet alongside drinking.
- The 'drinking wheel' may inadvertently contribute to people making decisions to miss meals or restrict food intake to compensate for high alcohol consumption.

Data Collection Method 3: Online Surveys

- Two online surveys
- Gathered via Survey Monkey and hosted by the eating disorder charity website, Beat (www.beateatingdisorders.org.uk)
- Collected descriptive data, with additional narrative boxes
- 1st survey aimed at people who self-identified as having an eating disorder (ED): Total 119 participants
- 2nd survey aimed at people working with people with ED e.g., clinicians in mental health services: Total 17 participants
- Questions relating to the 'use or misuse' of alcohol, the prevalence of alcohol use/misuse, the patterns and the interactions between alcohol misuse and ED, and the co-morbidity of the two.



Online Survey 1: People with ED

- In the ED data, patterns in behaviours were identified between certain variables.

For example, between:

Type of eating disorder

The **action** (of ‘replacing food for drink’ and ‘the use of exercise’)

The **reactions** (e.g., outcomes on health and wellbeing)

- A statistical test of significance was not possible with this small sample.
- But, it was possible to explore the case summaries and frequencies across certain variables, which provide some indication of patterns of behaviours.
- We looked to explore how people, based on their ED type, choose to manage their eating and drinking behaviours to help explain why people choose to replace one for the other or engage in additional physical activity or exercise to make up for their over consumption of alcohol and food.

Type of ED

Type of Eating Disorder	%	n.
Anorexia Nervosa	73.95%	88
Bulimia Nervosa	31.09%	37
Binge Eating Disorder	11.76%	14
Avoidant/Restrictive Food Intake Disorder	12.61%	15
Atypical/Other	13.45%	16
Other (please specify)	5.88%	7

**Other included - Orthorexia, EDNOS, OFSED, non-purging bulimic*

**Duration of years with an ED ranged from 0-30 years*

Results

- 'Action' (based on ED type): Does drinking make you eat more or less? Mixed response
- Restriction/skipping of meals when drinking alcohol common
- Changing eating habits in response to drinking alcohol is high among all ED types.
- An increase in ED symptoms and decline in physical health and psychological wellbeing was seen in response to drinking alcohol.
- When a choice was made to reduce food or increase exercise to make up for alcohol consumption
- The outcomes suggested that these choices and actions evoke very different reactions.
- But more socialisation, positive mood, humour and personality and positive aspects of control were also seen in all ED diagnoses when drinking alcohol. Note: some of these were seen as negatives in other cases.

Online Survey 2: MH/ED Clinicians

Mental health clinicians (75% were ED clinicians) identify that there is a link between the two

When asked, 'Do you think ED and alcohol use are connected in any way?'

Yes (68.75%) and Not Sure (31.25%)

- *"Alcohol use can make the ED worse (e.g. loss of control leading to increased bingeing or reduced food intake due to calories in alcohol)."*
- *"Alcohol misuse can exacerbate an eating disorder e.g. lead to binge eating or subsequent food restriction due to concern about calorie intake."*

However, when asked 'what is the proportion of people seen in ED service using or misusing alcohol?'

- 40-59% seen (6.25 of participants)
- 10-19% seen (25% of participants)
- **Less than 10% seen (56.2% of participants)**
- None seen (by 12.5%).

Implications

- Although the numbers were too small in this research to be sure, it identifies that there are many potential associations between alcohol use and eating behaviours for people who are seen in either eating disorder and alcohol services.
- Both groups of people appear to be at risk of developing problems in both areas of drinking and eating.
- Where this comorbidity occurs, there is a raised risk of a range of both physical and psychological health concerns.

Conclusions

- This research identified some intriguing patterns and associations between eating and drinking behaviours.
- One of the most interesting findings throughout all of the analysis in this research project, is that there is no single clear relationship between eating and drinking.
- Instead, there appears to be a wide range of links.
- We suggest that larger-scale, in-depth research is needed to advance understanding in this area to tease out and develop a deeper understanding of the interaction between disordered eating behaviours, eating disorders and alcohol misuse and dependency.

So.. Where do you think
we should go from here?

Thank you!

Jacinta.Tan@wales.nhs.uk

Gemma.Johns3@wales.nhs.uk

@DrJacintaTan