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<td>Wilson, Mitch; Cullen, Walter; Goodair, Christine; Klimas, Jan</td>
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Off the Record: Substance-related Disorders in the Undergraduate Medical Curricula in Ireland

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Tables: 1
Figures: 1
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Off the Record: Substance-related Disorders in the Undergraduate Medical Curricula in Ireland

Abstract

Background: Substance use disorders (SUDs) are a worldwide problem, and have become a major health concern in Ireland particularly. We aimed to determine the extent to which addiction medicine is embedded in the undergraduate medical curriculum in Ireland.

Methods: To further investigate the degree to which drug addiction is taught in the Irish medical curriculum an online literature search was performed using Google Scholar, PubMed (from 2009 to present), EMBASE, PsycINFO, CINAHL and Medline using the keywords “substance-related disorders”, “undergraduate”, “curriculum” and “Ireland”. Additionally, all Irish medical school websites were examined (n=6), and a Google search and manual searches of conference programmes were performed. We used the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) guidelines to systematically review and discuss findings.

Results: A total of zero published studies met the criteria for inclusion in an updated systematic literature search of addiction medicine education in the undergraduate medical curriculum in Ireland.

Conclusion: There is currently no documentation of drug addiction teaching sessions in Irish medical schools. Investigations that offer direct contact with the medical schools, such as a telephone survey, may provide a more accurate representation of the extent to which addiction medicine education is incorporated into the medical school curricula.

Word Count: 201

Keywords: addiction medicine, undergraduate, medical, education, curriculum
**Off the Record: Substance-related Disorders in the Undergraduate Medical Curricula in Ireland**

“If it’s not recorded, it didn’t happen.”

- An old saying

**Introduction**

The literature review by Ayu et al. (1), provides an insightful reflection on the early attempts at describing curriculum development and implementation of addiction content into various learning environments. We commend the authors on their extensive review, and also wish to discuss the literature on addiction medicine education in the Irish medical schools.

Substance use disorders (SUDs) are a worldwide problem (2), and have become a major health concern in Ireland particularly. In fact, the annual amount of alcohol consumption per adult in Ireland has increased by at least 46% since 1987 such that Ireland currently has the second highest rate of alcohol consumption in Europe (3).

A large proportion of people who use drugs are cared for in general practice and primary care, and thus it is paramount for general practitioners (GPs) to be trained to provide care to these patients. Addiction science has brought new effective treatments (4). For example, it has been demonstrated that brief interventions which motivate substance users to change their behaviour are an effective means to improve substance use behaviours (5). Recent studies reported decreases in alcohol use and smoking by 17.8% following GP interventions (6).

While these interventions show great promise to provide benefit, many GPs report that they feel inadequately trained to treat SUDs (7). For instance, in the UK, it has been demonstrated that GPs were unable to identify a large proportion of patients...
with an SUD (8). The time has come to integrate addiction medicine into GP education (9).

Recently, O’Brien and Cullen searched PubMed for published literature on training of undergraduate medical students in identifying and managing SUDs (10). They found no papers about formal undergraduate teaching on the treatment and management of SUDs in Ireland, despite the increase in problem drug and alcohol use over the past few decades. In their new position paper on addiction, the Irish Medical Organisation recognised the lacking education and called for “appropriate training of all physicians in treatment of addiction.” (11) To address this gap, additional systematic literature searches were performed.

**Methods**

An updated systematic literature search was performed using Google Scholar, PubMed (from 2009 to present), EMBASE, PsycINFO, CINAHL, Medline and Google using O’Brien and Cullen’s original search strategy “substance-related disorders”, “undergraduate”, “curriculum” plus “Ireland” as the country limit. Additionally the websites for each of the medical schools were examined for relevant information, and if a search engine existed within the website the aforementioned search criteria were used. The abstracts of all publications produced by these search terms were reviewed to determine if the papers were relevant to our study. Lastly, the programmes for the Association of University Departments of General Practice in Ireland (AUDGPI) conferences from 1999-2010 and the 2009 University College Dublin Summer Student Research Award (SSRA) symposium in Ireland were manually searched. We used Preferred Reporting Items for Systematic Review and
Meta-Analysis (PRISMA) guidelines to systematically review and discuss findings (12) (Figure 1).

<instructions for editors: insert Figure 1 about here>

Results

Of the online literature databases, Google Scholar was the only database to provide any articles based on the search criteria (n=33) (Table 1). However, upon examination of the abstracts, none of these publications were deemed relevant to our research topic. The Google and medical school website searches, as well as the manual searches of the AUDGPI, and SSRA proceedings, did not yield any information relevant to our study.

<instruction for editors: insert Table 1 here>

Discussion

In summary, our systematic literature search revealed no documentation of addiction medicine education in the undergraduate medical curriculum in Ireland. These results are in agreement with the 2009 O’Brien and Cullen’s PubMed search that demonstrated a complete lack of addiction medicine education in the Irish medical curriculum. Our findings - using multiple search techniques including several online databases, an inspection of the six Irish medical school websites, a Google search, and a manual search of the conference programmes - underlines the complete lack of documentation of addiction medicine education. If it’s not recorded, did it happen? Anecdotal evidence, and the former PubMed search (2009), suggests that the extent of the addiction medicine education might be indeed limited to as little as two hours. Furthermore, our findings also indicate that despite the increasing prevalence of substance use disorders in the general population, no measures have

Running title: Addiction education off the record
been documented in the last four years to provide undergraduate medical students with formal teaching sessions in addiction medicine. Investigations, other than literature reviews, have been made to obtain information about addiction medicine education in Ireland. For instance, a 1999 report published in Eurocare summarizes a meeting between experts in addiction medicine education across Europe, with Ireland’s perspective being provided by Dr. Hannon of the National University of Ireland, Galway (13). In line with the findings of literature reviews, it was reported that drug and alcohol dependency were not addressed in the undergraduate medical curricula across Ireland.

The primary limitation of our systematic literature search was that we did not contact medical educators to ask them about unpublished reports and curricula, i.e., grey literature. If any teaching sessions in addiction medicine do exist in the Irish undergraduate medical curricula, this information is not published in the peer-reviewed literature and university websites; therefore, would not be detectable using our search strategy.

To address this limitation we aim to develop a telephone survey that would allow the collection of addiction medicine education information that exists outside of published literature and the World Wide Web. The survey would cover six distinct learning outcome areas of addiction medicine, originally developed by Carroll et al. in 2014 (14). The results would provide a much more definitive determination of the extent to which addiction medicine is embedded in the Irish undergraduate medical curriculum. Once we establish the extent of addiction medicine education, the educators can then make a more informed decision in terms of introducing a more comprehensive curriculum on addiction medicine.
Conflicts of interest

None reported.

Acknowledgements
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References


4. Klimas J. Training in addiction medicine should be standardised and scaled up. BMJ. 2015;351(h4027).


### Table 1 - Systematic literature search results

<table>
<thead>
<tr>
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<th>Date range for searches</th>
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</table>
**Figure 1** - PRISMA Flow Diagram illustrating the systematic process of reviewing addiction medicine education literature

- **Identification**
  - Records identified through database searching
    - \( n = 33 \)
  - Additional records identified through other sources
    - \( n = 0 \)

- **Screening**
  - Records after duplicates removed
    - \( n = 33 \)

- **Eligibility**
  - Records screened
    - \( n = 33 \)
  - Records excluded
    - \( n = 0 \)
  - Full-text articles assessed for eligibility
    - \( n = 33 \)
  - Full-text articles excluded, with reasons
    - \( n = 33 \)

- **Included**
  - Studies included in qualitative synthesis
    - \( n = 0 \)
  - Studies included in quantitative synthesis
    - \( n = 0 \)