Reporting on training developed for Pharmacy Assistants and Pharmacy Dispensary Technicians working with Medication Assisted Treatment for Opioid Dependence (MATOD) consumers in regional Victoria

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Executive summary

A recent study (Patil et al., 2018) analysing lived experiences of Medication Assisted Treatment for Opioid Dependence (MATOD) consumers suggested that some experienced discrimination and stigma in the pharmacy context in regional Victoria, Australia. One of the recommendations was to explore professional training and education opportunities for allied health professionals and in particular, Pharmacy Assistants (PAs) and Pharmacy Dispensary Technicians (PDTs) as they are integral to serving MATOD consumers. Ballarat Community Health commissioned Federation University to develop training modules for PAs and PDTs working in the pharmacy settings in regional Victoria.

A survey of the literature identified two key issues, namely, the lack of professional education and training of PAs and PDTs involved in serving the consumers in pharmacy settings either at the national or state level in Australia. The other finding was the varied use of different types of 'opioid dependence' treatments in different jurisdictions of Australia which had implications in terms of embedding psychosocial or Social Determinants of Health (SDH) with therapeutic treatments.

As a result, this project serves as a significant step in employing SDH based training modules for PAs and PDTs working with MATOD consumers in the pharmacy settings to address stigma and discrimination. The training workshop materials will be evaluated to determine its efficacy in terms of change of attitudes and professional practice.

The aim of this study is to:

1. Deliver and evaluate a new professional training module concerning MATOD and;
2. Examine and evaluate the efficacy and impact of the training module on professional practice and changes in attitudes towards stigma and discrimination amongst PAs and PDTs.

This project was conducted in two stages. At the first stage, two workshops (each lasting for two hours) were delivered in two different regional locations in the state of Victoria, Australia (referred to as locations A and B in this report). Thirteen participants expressed interest in location A but eleven attended both training workshops. In location B, fourteen attended the first workshop, while twelve attended the second workshop. Participants who attended the training were administered pre-training and post-training surveys. The pre-training surveys included demographic information, professional experience, educational background and professional training, whereas the post-training survey involved questions about the impact and efficacy of the training delivered. The second stage involved conducting in-depth qualitative interviews with participants who attended the training workshops. The main goal was to evaluate the impact on professional practice and change in attitudes amongst PAs and PDTs.

Data collected from the surveys and interviews were analysed using quantitative and qualitative content analysis via an inductive process. In addition, an interpretive phenomenological analysis was undertaken to identify and code themes emerging from the interviews. Ethics approval was received through the Federation University's Human Research Ethics Committee before the commencement of this project.

Pre- and post-training workshop survey findings:

The pre-workshop findings demonstrated that the majority of the participants received training in health and wellbeing and customer service-oriented fields but no specific training related to MATOD program and MATOD consumers. The pre-workshop findings showed that 75% of the participants had knowledge of MATOD program, whereas others answered Not Applicable or No to the question about MATOD in the survey. The pre-workshop survey hinted to the lack of training opportunities and the urgent need to tailor specialised opioid dependence training to staff serving customers in the absence of formal training.

Post-workshop findings in both locations showed that the training for the majority of the participants was positively received and that the material was relevant. This finding was determined when most participants agreed that the training and content were overall pertinent to their professional work as it assisted them with strategies to improve customer service. Additionally, they realised that they gained new information and enhanced knowledge about MATOD programs and consumers, developed increased interest in MATOD and found the content to be relevant to their level of understanding.

Findings from both pre- and post-workshop surveys highlighted that PAs and PDTs are keen to undertake and be provided with professional training related to MATOD. Another common theme that emerged was the impact of the training materials on participants' understanding of SDH and its link to 'opioid dependence'. Many of the participants appreciated learning about the psychosocial context of 'opioid dependence' and its link to stigma and discrimination. These themes suggest that participants developed new knowledge about opioid dependence.

In-depth interviews findings:

Three themes emerged from the analysis of the in-depth qualitative interviews. These comprise (1) professional roles and responsibilities, (2) efficacy of training and (3) implications of the training on professional practice.

The first theme demonstrated how participants were limited by their position descriptions and lack of prior training in working with the MATOD consumers. Many participants utilised intuition and interpersonal skills to develop healthy relationships with the consumers with a preconceived understanding of the consumer's experience of stigma and discrimination. To illustrate, one participant, noted:

> "I'll always walk past the window and say "Hi, how are you going, and I will give them the same courtesy as I would someone who is at the counter".

There were other perspectives about MATOD consumers which suggested that participants used negative connotations, such as "need to watch them [consumers]" and "druggies" to characterise interactions with MATOD consumers. Indeed, this refers to the gap in the literature identified in this study that relates to lack of professional training opportunities for PAs and PDTs to understand opioid dependence better.

The second theme demonstrated that the training modules encouraged participants to recognise how systemic factors impacted health and wellbeing of MATOD consumers. The training increased their

knowledge of varied pathways to opioid dependence and challenged their assumptions about MATOD consumers as well as 'illicit drug use'. In context to the delivery of the training module, the majority of the participants found the case study approach to be a valuable educational tool as scenarios were relevant and relatable to their personal histories.

Additionally, the learning materials were found to be informative, causing some participants to gain new knowledge and awareness about stigma and discrimination that, in effect, reinforced their existing strategies. However, others found the materials to be intimidating, confusing and sometimes irrelevant due to possible complexities in internalising new concepts within a strictly limited timeframe.

The third theme demonstrates the range of impacts caused by the training module upon the participants that unlocked active implementations and passive implementations of learnings from the course. Active implementations were demonstrated by participants who enhanced their existing strategies, and those who felt validated to use their existing skills in working with the consumers to minimise stigma. This finding was accompanied by participants' increased awareness and understanding of consumers' possible feelings of stigma and discrimination in the pharmacy. This is captured powerfully in one of the responses when a participant states:

> "It was fantastic again, delving into the relevance of why things have happened. It broadened out what I perhaps already knew in myself that there's a whole lot more - that there's a great deal about why people make the decisions that they do and why there's health issues in the community that there is. It's probably reinforced something that I didn't really know that I knew".

A subset of these participants further reported that although they gained more awareness about MATOD and the surrounding stigma, the training made no impact on their professional practice to the extent of enhancing their strategies and interpersonal mannerisms and skills.

This project overall identifies 'consciousness-raising' by many participants due to greater awareness of the implications of their actions. This development supports that the training helped facilitate the creation of knowledge around the social construction of health and an understanding of the impacts of language-use, attitudes and behaviour. Based on these findings, this report provides multi-faceted recommendations for improving and expanding the training module across interconnected health and medical personnel, state and nation-wide.

Recommendations

Summary of the efficacy and impact of the training focused on stigma and discrimination

1. The effectiveness of the training workshops in terms of increasing knowledge of stigma and discrimination associated with MATOD was endorsed by majority of the participants, namely pharmacy assistants and dispensary technicians.
2. Case studies which were a critical part of the training modules were unanimously endorsed by the participants.
3. The training was able to increase awareness of the implications of using stigmatising language. Some participants specifically noted that they were able to recognise and learn about the stigmatising assumptions they had in relation to the MATOD program.
4. The training was effective in terms of the participants being able to implement strategies to lessen the anxiety of MATOD consumers in the pharmacy setting.
5. The training had the effect of altering understanding (and possibly) behaviours within the work environment.

Recommendations for future professional training

1. Pharmacy Assistants and Pharmacy Dispensary Technicians to increase knowledge and raise awareness about stigma and discrimination associated with the MATOD program.
2. Explore strategies that target, both, professionals and the broader community to tackle issues of stigma and discrimination associated with the MATOD program.
3. Develop training modules that integrate social determinants of health with knowledge of MATOD program.
4. Consider rolling out the training modules across Victoria to a range of health professionals both through face-to-face and online modules.
5. Training may be of benefit to other professionals, including general practitioners, reception staff in medical practises, practice nurses and practice managers.
6. Consider increasing the frequency of the training workshops with learning materials and the volume of content needing to be streamlined across the various workshops.
7. Consider developing a professional educational training package that can be offered commercially.
8. Offer induction training to pharmacy assistants and dispensary technicians that provides orientation into their roles and responsibilities in the pharmacy setting.

Introduction

The commissioned research project reports on the evaluation and efficacy of the training modules for Pharmacy Assistants (PAs) and Pharmacy Dispensary Technicians (PDTs). The training modules were focussed on highlighting the social factors that impact on the health and wellbeing of consumers using the Medication Assisted Treatment for Opioid Dependence (MATOD) program in the Central Highlands region in the state of Victoria, Australia. Two-hour training workshops were delivered in two regional locations across the Central Highlands region.

The learning materials, training workshop exercises and case scenarios were developed from insights from consumer experience of MATOD treatment in the pharmacy setting. Previous research conducted by the authors (Patil, Cash, Cant, Mummery & Penney, 2019; Patil, Cash & Penney, 2018; Patil, Cash, Penney & Cant, 2018) concluded that consumers felt that stigma and discrimination surrounding MATOD treatment impacted on their health and wellbeing. While some consumers had good experiences in the pharmacy setting, the majority felt that there needed to be greater education among allied health professionals involved in working directly with MATOD consumers. Furthermore, despite PAs and PDTs being integral to the delivery of MATOD services, this group faces lack of routine professional development opportunities concerning addiction and its management. This led to the authors being commissioned by Ballarat Community Health to develop training modules for PAs and PDTs in the Central Highlands region. The current report will report on the effectiveness of the learning materials and the training workshops conducted by the authors in collaboration with experienced pharmacists associated with Ballarat Community Health.

The aims of this project are to

1. Develop, deliver and evaluate a new professional training module concerning the MATOD program and MATOD consumer experiences of marginalisation and stigmatization to PAs and PDTs working in the Central Highlands region and;
2. Examine and evaluate the efficacy and impact of the training on professional practice and changes in attitudes towards stigma and discrimination among PA and PDTs working in the Central Highlands

To achieve these aims the project will

1. Examine PAs and PDTs' understandings of the MATOD program and consumers of MATOD, pre- and post-training;
2. Explore PA and PDTs' experiences of engaging with training materials related to 'substance use' and 'Social Determinants of Health (SDH)' and;
3. Evaluate the impact of the training and shifts in professional practice among PAs and PDTs after the training provided by Federation University and the Ballarat Community Health Centre

Outcomes of the commissioned research will assist with the potential to facilitate change across allied health sectors that are working towards the alleviation of certain groups' experiences of stigmatisation and marginalisation in accessing and using such professional services as MATOD.

Before, we present the results of the existing literature on MATOD training for allied health professionals, we turn to clarification of terminology.

Clarification of terminology

For the purposes of this research we will clarify what is the scope of the roles of the PAs and PDTs in the context of the pharmacy setting. An understanding of these roles will allow the authors of this study to make recommendations that fit within the scope of their roles and responsibilities. To clarify the roles, we are using the Pharmacy Board definition of a 'dispensary assistant/technician' as a "suitably trained individual who assists a pharmacist in the preparation, dispensing and supply of medicines, and other tasks in a pharmacy business or pharmacy department" (Pharmacy Board of Australia, 2015, p.16). The definition of the PA, which is also referred to as Pharmacy Sales Assistant, pertains to those who work under the supervising pharmacist utilising a range of well-developed skills to identify and meet customer needs (Training, 2016). Some specific tasks highlighted by the Victorian Department of Education and Training (n.d.) include selling goods that are non-prescription-based, processing payments, advising customers on the selection, price and usage of non-prescription medicines and assisting with ongoing management of stock.

To define opioid dependence, whilst acknowledging wide-ranging discussion (Burns et al., 2015; Digiusto et al., 2006; Fischer et al., 2002; Mattick et al., 2004; DHHS, 2016; Ward, Hall & Mattick, 1999; World Health Organization, 2009), the preferred definition for the purposes of this study is MATOD. The primary reason for this is the strong focus on the pharmacological but also psychosocial elements that this framework embodies. Further detailed discussion of the benefits and subtle differences between different opioid dependence treatments is found in the literature review.

We turn next to presenting the findings of the scoping of the existing literature on MATOD program and training of allied health professionals.

Literature review

Introduction

The MATOD program is a Victoria-wide treatment program for narcotic dependency often delivered through the pharmacy setting. The purpose of this review was to scope the broad themes associated with professional education and/or training of PAs and PDTs involved in the service delivery of MATOD consumers in the pharmacy setting. Databases used for this review include EBSCOhost, PubMed, and Google Scholar. Boolean searches were carried out using search terms, such as 'professional training of allied health professionals', 'training/education programs', 'psychosocial' 'social determinants of health' and 'MATOD'. A scoping of the literature using the aforementioned search terms identified three broad themes:

1. The link between various definitions of opioid dependence and the connection to social determinants of health;

2. The training of professionals within the pharmacy context and specifically working with MATOD consumers and;
3. The presence of psycho-social or social determinants of health (SDH) in pharmacy training.

First, the review discusses the definitions of opioid dependence and the impact they have on pharmacy training. Definitions are discussed to ensure accuracy and transparency regarding how the policy surrounding MATOD administration is designed, administered and delivered. The analysis begins broadly observing research concerned with training pharmacists in MATOD before narrowing in on pharmacy assistants and pharmacy technicians. Using search terms such as “social determinants of health”, “social”, and “psychosocial” provide insight into research on the interconnections between pharmacological and psychosocial parts of treating opioid dependence in the Australian but more specifically the Victorian context.

The *second theme* observed is the SDH for MATOD. The analysis of this theme includes wide scope observations of social determinants of health with research terms such as “opioid”, “medication-assisted”, “pharmacy”, “education” and “training” providing refinement to the scope. Again, geographic relevance is considered in-situ. The *third theme* constitutes the investigation of SDH training and education.

Definitions

In this literature review, MATOD includes opioid replacement therapy (ORT), and opioid substitution therapy (OST) which are common variants that emphasise the use of methadone, suboxone, and buprenorphine as chemical substitutions for clients with opioid dependencies. Where MATOD varies from ORT and OST is the inclusion of psychosocial support in the treatment program (Commonwealth of Australia, 2014). This means that psychosocial factors, including influencing elements such as the client’s SDH, are included in the treatment of opioid dependency.

MATOD is the preferred nomenclature of this literature review which adheres to contemporary treatment nomenclature of opioid dependency in the Australian context (State of Victoria Department of Health and Human Services [DHHS], 2016; Commonwealth of Australia, 2014; State of Queensland QH, 2018; Government of South Australia SA Health, 2016). A review of ORT and cognate programs in Australia, including other problems of designation, can be found in Patil and colleagues (2018).

McAnally (2018) indicates that medication-assisted treatment combines the pharmacotherapeutic use of agonist or antagonist medications with a psychosocial focus. This later element includes both the client’s behaviours or attitudes and their broader systemic social and cultural situation. The World Health Organization (WHO), conversely, uses Psychosocially Assisted Pharmacological Treatment of Opioid Dependency (no acronym is presently recorded) (World Health Organization, 2009). An awareness of the varying nomenclature surrounding MATOD is important in understanding the scope of the individual programs and the research findings in this report. Where ORT or OST is present, it is assumed that the SDH, and a psychosocial model of treatment, have limited consideration unless explicitly stated otherwise. For instance, in Wood (2018) it is acknowledged that ORT “is included in a comprehensive treatment program that also involves counselling, and physical and mental health monitoring and support” (p. 29). It places ORT as a constituent of a broader

program, indicating psychosocial support as additional to ORT rather than integral to ORT itself. Where MATOD is present in the literature the psychosocial treatment is already embedded and considered a major component of the research claims and the program itself. Additional cognate designations for MATOD are also observed but do not impact this literature review since they expand its scope beyond what is used in pharmacy settings in Australia and specifically regional Victoria.

The definitions and use of SDH are in keeping with those used by the Australian Institute of Health and Welfare (AIHW, 2016, p.129):

> …the circumstances in which people grow, live, work, and age, and the systems put in place to deal with illness. The conditions in which people live and die are, in turn, shaped by political, social, and economic forces (Commission on Social Determinants of Health, 2008).

These are based on the original conceptualisation by Marmot and Wilkinson (2006), although this review also considers public health models including ecological and interactive/relational models of the SDH (Ansari et al., 2003).

In summary, a review of the literature on evolving definitions of opioid dependence suggests that MATOD actively integrates psychosocial or SDH with pharmacological intervention. This change has significant consequences in terms of the service provision and administration of MATOD in the pharmacy setting. We turn next to literature on professional training of opioid dependence in the Australian context.

Pharmacy training for MATOD

In the Australian context, the literature for pharmacy practice and pharmacology exists alongside psychological and social support. For instance, Wood (2018), Caulfield (2009), Pricolo (2011), and Newton (2017) discuss the inclusion of psychosocial support in ORT but there is a gap in the literature that specifically discusses the benefits and efficacy of having included psychosocial aspects. Much of this literature, Wood (2018), focuses on discussing, for instance, the social harms and effects of opioid dependency in addition to desired social outcomes from ORT programs (DHHS, 2016; Gowing, Ali, Dunlop, Farrell & Lintzeris, 2014). In this case, claims on the role of psychosocial support are limited while the SDH are absent. Robertson, Bond and Matheson (2015) also indicate that ORT has a medication supply focus, and although they acknowledge that pharmaceutical care must “encompass notions of prevention of harm and facilitation of treatment adherence” (p. 639), they do not go so far as to acknowledge psychosocial support or dispensary awareness of SDH.

The Pharmacy Board of Australia (2015) presents guidelines in the training of pharmacy (or dispensary) assistants and technicians. These guidelines outline the interdependent nature of the relationship between the pharmacist and assistants or technicians (Pharmacy Board of Australia, 2015, p.16). Training consists of Certificate II, III or IV level courses under the Retail Services Training Package, and/or the Health Training Package (Pharmacy Board of Australia, 2015, p.13). Competencies for PAs and PDTs provide limited scope for including specific training for MATOD. The guidelines also indicate that training is not mandatory, and the education of PAs and PDTs may be at the discretion a pharmacist. It is difficult to observe how MATOD, and

SDH informed practice, would form part of pharmacy staff knowledges without intervention. Although, S2 (Pharmacy Medicines) and S3 (Pharmacist Only Medicines) training is available in a number AQF courses under the Health Training Package which includes preliminary training in ORT, again, the extent of SDH knowledge is undetermined. Training for Victorian pharmacists wishing to engage MATOD are currently provided by the Pharmaceutical Society of Australia (PSA), and two government policy documents influence the dispensing of MATOD in Victoria (Commonwealth of Australia, 2014; DHHS, 2016).

The Victorian DHHS indicates a formulaic approach to policy which is concerned with harm minimisation and accurate provision of medications while excluding significant discourse on psychosocial or SDH knowledge. Conversely, the Australian National guidelines (Commonwealth of Australia, 2014) explicitly indicate the need to integrate psychosocial and SDH factors in the treatment and provision of opioid dependence. The training modules delivered by PSA were unavailable for assessment for this literature review. None of the policy or guideline documents promote training PAs and PDTs for understanding or service delivery of SDH informed MATOD. Patil et al. (2018) indicate that this could be a benefit to user experience within the pharmacy setting.

MATOD and social determinants of health

The inclusion of SDH within MATOD policy and research is considered in this section. WHO (Commission on Social Determinants of Health, 2008) considers substance abuse in its observations of SDH, placing it into a causal environment that should consider socioeconomic context and position (p. 98). Interventions are at the level of alcohol and drug policies, and not at the level of the individual, or of their immediate milieu. They do not consider MATOD (or its variants) in relation to substance abuse or SDH.

In the context of Victoria, Australia, SDH is not directly addressed in MATOD guidelines although acknowledgement of psychosocial informed treatment is considered, in addition to harm minimisation (DHHS, 2016). Other Australian states and territories include a comparatively increased focus on the psychosocial aspect of MATOD, for instance State of Queensland (2018), although the extent of SDH informed practice is still uncertain in the policy literature. Further still, it is uncertain how these policy documents inform pharmacy retail practice, which the current project aims to do.

Commonwealth of Australia (2014) guidelines for MATOD include a significant focus on psychosocial support and consider it “critical to sustainable change” (p. 4). These guidelines deliver in-depth researched advice for assessing SDH and including this as part of the treatment plan for opioid dependence. Inclusion of psychosocial support is oriented toward the treatment or therapy protocol itself. It does not address service delivery or the social environment of the site of administration (pharmacy). Wherein stigma is addressed, these guidelines orient toward patient and community safety rather than distributed awareness of SDH.

Patil et al. (2018), in reviewing the role of community pharmacy and consumer perception in ORT, observe that “most of the studies did not analyse better education for dispensers about the psychosocial needs of consumers of opioids and the need for holistic care that includes pharmacological, psychosocial and mental health interventions”. The specific context of this study is relevant insofar as it observes regional and rural

community pharmacy. An expanded scope to include different geographies and contexts finds some discussion of SDH in relation to MATOD (n=103), although none of the research articles analyse the specific relation of SDH to MATOD.

Some related research is informative, such as Rovers and Mages (2017), who argue that “pharmacists can promote access to medications as a social determinant of health”. This study attempted a model for drug distribution inspired by SDH and observes the importance of pharmacists in SDH (Rovers and Mage, 2017, p.10). Hager et al. (2017) observe the SDH of opioid misuse and analyse the improvements in problem solving in pharmacy and medical students, while Selin (2017) argues that psychosocial support would benefit clients of OST throughout the treatment system (presumably including the site of administration). Thus, while SDH knowledge may be lacking for addressing stigma in MATOD interventions (except insofar as it is observed for explaining the abuse), some support is present for including it at the within the treatment protocol.

In summary a review of the literature suggests that the inclusion of SDH in treating opioid dependence from a service delivery and service provision standpoint is poorly researched. There are a number of disaggregated policy frameworks which either speak explicitly or implicitly for including SDH or psychosocial support in treating opioid dependence. A review of the literature suggests there is very limited research that directly speaks to the use of SDH for MATOD programs to address stigma and discrimination in the community and specifically in the pharmacy setting.

Social determinants of health, training and education

As previously observed in this literature review, there is a gap in the literature concerning SDH and MATOD training for PAs. A search of literature for SDH and “training” that includes the search terms of “opioid” and/or “drug”, might offer an alternate inclusion pattern. One article from this literature search, that includes “opioid”, is potentially relevant for building training packages to address SDH in MATOD, although it avoids developing sustained conclusion for SDH in MATOD (Holbrook and Nguyen, 2015). Further searches of academic open some interdisciplinary possibilities and provide potential for building training packages for SDH with MATOD. However, not all (n=93; n=1816; n=337) results are relevant. While SDH is incorporated into the results in a variety of ways, nil scholarly journal results indicate a planned practical training model for SDH. However, a number of studies explore their own experience delivering training and provide the main elements of their training. The notable studies are recorded here.

Blas, Sommerfeld and Kurup (2011) provide a comprehensive review of 14 case studies where the aims are to improve equity for health outcomes by addressing SDH. The overview observes five levels of analysis for reviewing the case studies: “socioeconomic context and position, differential exposure, differential vulnerability, differential health outcomes and differential consequences” (p. 2). They further indicate from their review of the case studies five themes that can be observed in programs that deploy SDH education (p. 4 - 5). Important research imperatives for using SDH in community pharmacy education for MATOD, drawn from these themes, include managing policy change, managing intersectoral processes, and adjusting

design (p. 5). It also acknowledges the need for an adaptive design process, given appropriate feedback during the training programme, and indeed the importance of advocating for policy change. Blas, Sommerfeld and Kurup (2011) avoid a universal model for SDH education but do conclude that interventions that address inequity, which would include education programs, must be aware that it is "is a values-based endeavour" (p. 200). This is the case insofar as transformations from SDH occur at the level of culture and society, and not necessarily with quantifiable outcomes. Their other conclusions repeat some of the themes of the case studies overview including ongoing systematic monitoring of the program and evidence gathering (p. 200).

Blas and Kurup (2010) deliver an expanded framework of analysis using the five analytic levels listed above. Herein they provide their actional analytic tool that allows a program, which is considering an intervention at a certain level, to input relevant SDH data in order to influence outcomes. Both of these analytic examples in Blas and Kurup (2010) produce an analysis of at least socioeconomic context and position, differential exposure, and differential vulnerability. An education that presented this framework to PAs, while including carefully mapped data relevant to MATOD, would constitute a structural intervention in order to address stigma occurring at the level of differential consequences.

Potential also exists to inform MATOD training, including SDH, with "didactic" training models with positive outcomes recorded which would consist of lectures combined with volunteer fieldwork (O'Brien et al., 2014). However, its relevance to MATOD and addressing stigma would have to be carefully mapped. An emphasis on interprofessional training for SDH offers a beneficial avenue and incorporates regular group meetings of professional organisations and clinicians (i.e. medical professionals) to discuss SDH in the relevant context (De Los Santos, McFarlin, and Martin, 2013; Blas, Sommerfeld, and Kurup, 2011). Given the service level of the participants of the present research project, however, research literature that concerns education at the clinical level is likely to require dramatic adaptation. This, of course, excludes a number of remaining education frameworks uncovered in the literature review. In this regard, too, the WHO documents such as Blas and Kurup (2010), offer a clear area of orientation in understanding the SDH of MATOD end-users.

Gaps identified in current practice

It is evident in the literature that discussion about varied treatments of opioid dependence have implications for service delivery and/or service provision. A review suggests that MATOD treatment actively integrates the pharmacological/therapeutic intervention with SDH or psychosocial framework. While this is an important development that has consequences for service provision and service delivery in Victoria at the pharmacy level, there is very limited research that analyses the link between training and its efficacy in embedding SDH. As such, there was absence of any literature on the training modules delivered to pharmacists and other professionals working with MATOD consumers.

Another interesting feature of the debate is the disaggregated and diffused manner in the way the guidelines of policies are defined at different levels, namely state, federal and international levels. What was distinct was the Commonwealth guidelines on opioid dependence preferred to explicitly integrate the

pharmacological/therapeutic treatments with psychosocial supports, whereas the research suggested that it was more varied and undetermined at the state levels. In relation to international literature mostly coming from the WHO, they have a strongly SDH focus in the design, service provision and delivery of MATOD treatments.

These two sets of findings raise two gaps within the literature that this research aims to contribute to. They are primarily related to developing a training module for PAs and PDTs which explicitly embed knowledge of SDH with opioid dependence with the specific purpose of tackling stigma and discrimination of opioid dependence. The other aim is to evaluate the efficacy of the training in changing attitudes around stigma and discrimination associated with MATOD program and MATOD consumers in the pharmacy setting.

Research methods

Methodology and methods

The study utilised mixed methods (Bryman 2006; O'Cathain, Murphy & Nicholl, 2007), including open-ended surveys and in-depth qualitative interviewing (Harris & Brown 2010). O'Cathain, Murphy and Nicholl (2007) note that mixed methods are particularly useful in health-related research and believed that qualitative interviewing methods added richer description and depth to the data collected. Qualitative data was collected through both pre- and post-workshop surveys and semi-structured interviews. This method was pursued through the lens of interpretive phenomenology to help identify and code themes via an inductive process. It is also done through the understanding that semi structured interviews are most ideal to collect qualitative data (Kelly, 2010) as the qualitative data collected as a result is not only 'thick but textual' (Geertz cited in Kelly, 2010). The advantage of this method is the 'reflexivity and their basis in shared human competencies of communication' (Kelly, 2010, p.11).

Ethics approval was received through Federation University Australia's Human Research Ethics Committee prior to commencement of the project.

Data collection methods

Data was collected through two modes, namely, surveys and semi-structured interviews. Two two-hour training workshops were held in two regional locations in the Central Highlands region of Victoria. In order to maintain anonymity of the participants[1] and participating pharmacies, the two regional locations will be identified as location A and location B. Before the first workshop was delivered, pharmacy assistants and dispensary technicians were asked to complete a pre-workshop survey. In location A, 11 participants attended the first and second training workshops. In location B, 14 participants attended the first training

[1] For the purposes of this research 'participants' refer to PAs and PDTs who attended the training as well as participated in qualitative in-depth interviews.

workshop whereas 12 attended the second workshop. At the end of each of the training workshops, participants filled surveys which had open-ended questions. Approximately 6 to 8 weeks after the conclusion of the training, participants were approached by a member of the research team who was not involved in the delivery of the training workshops to conduct in-depth qualitative interviews which took between 20-40 minutes to complete. Interviews took place in comfortable and mutually agree locations and included interpreters as required. Each interview was audio-recorded to facilitate transcription and analysis. In location A, we interviewed 6 participants and 4 in location B.

Participants, who attended both workshops, completed the pre-workshop survey, and the workshop evaluation sheet were offered a voucher of $75 dollars. If they attended an interview, they were offered an additional $25. The managers of the participating pharmacies did not receive any financial benefit/incentive for their staff to participate in this project.

Data analysis

The pre- and post-workshop survey data were analysed using mixed methods, qualitative and quantitative analyses via an inductive process (Kumar, 2010). The qualitative analysis derived themes from the survey data and the quantitative analysis provided descriptive statistics describing results with the help of visualisation of data in tabular and graph formats. Similarly, interview responses were analysed using a qualitative inductive process (Kumar, 2010), and the qualitative interview data was summarised into themes using NVivo 12 through content analysis[2]. This analysis followed four stages that included familiarisation of the collected data, coding of data, categorisation of codes into themes and review of the themes and creation of sub-themes. Each theme, comprising at least one or more sub-themes, describes participants' changes in attitudes and professional practice, and is supported by excerpts provided in the results section. Overall, the themes derived from the data form the basis to assist service providers to plan future improvements to the ORT program including the development of best practice guidelines.

Findings

The findings from the data collected will be divided into two sections:

- Summary of the pre- and post-workshop surveys conducted in location A and location B and;
- Findings and identification of themes from the qualitative interviews

[2] While the funder is one of the authors, she did not have access to the qualitative or quantitative data/feedback received from the participants. She was only able to access de-identified data as presented in the Findings section. As such she did not have any input in the coding and analysing of the data.

Pre-workshop survey findings

Summary of pre-workshop survey in location A

Thirteen (13) participants filled out the pre-workshop surveys. The surveys collected information about demographics, educational levels, employment status, MATOD awareness and professional training with an open-ended questionnaire on further education. The percentage of participants (36%) were split evenly between the age groups of 26 to over 40 years. All the participants were female. 55% of the participants had completed year 12. A further 27% had completed Trade/technical/vocational training. Only a small percentage of participants (18%) had not completed year 12.

Experience and Pharmacy-related training

55% of the participants were PAs whereas the others were PDTs. The majority of the participants (64%) worked part-time hours and reported a broad range of experience from one (1) year up to twenty-four (24) years. Four (4) participants had less than five (5) years of experience. Two (2) participants had more than Twenty (20) years of experience.

Although more than two-thirds (73%) of participants had completed generic training, none had completed MATOD related training. 42% of the participants reported that they had undertaken health and wellbeing training. The other training that half of the participants had undertaken was retail/customer service-related training. Despite none of the participants having any MATOD specific training, 55% of the participants reported to have served MATOD consumers (Table 1). Some of the tasks they recorded were related to processing payments and processing scripts for MATOD consumers.

Pharmacy related training	Generic training completed?	Yes	8	73%
		No	3	27%
	Specific training completed?	ORT	0	0%
		Oral health	2	16%
		Health and wellbeing	5	42%
		Other	5	42%
MATOD awareness	**Participants aware of ORT program?**	**Yes**	5	45%
		No	6	55%
	Participants served MATOD consumers?	**Yes**	6	45%
		No	5	55%

Table 1. Participants representing data on pharmacy-related training and MATOD awareness in location A.

Comments on the need for further education to assist pharmacy work

Most participants reported a desire to gain a greater understanding of the program or a need to have access and use of as much information as possible. Some participants recorded that further education is needed in order to assist with their customer service role, in gaining confidence (unspecified), or for first aid and emergency situations. Two participants recorded their desire to understand the client's experience of the program, and one of these noted the presence of some stigma with the program. In turn, this participant indicated a desire to change the stigma. There are nil indicators of participants holding negative perceptions of MATOD. Two participants commented "no" or "n/a".

Summary of pre-workshop survey in location B

17 participants filled the pre-workshop surveys. 53% of the participants were over 40 years with 20% being between the age group of 26 to 40 years. 12 of the 13 participants were female. 40% of the participants had not completed year 12, whereas 26% had completed year 12. Interestingly, a very small percentage only 6% had completed trade/technical/vocational training.

Experience and Pharmacy related training

The majority (48%) of the participants were PAs, while 33% were PDTs. 46% percent of the participants worked more than 35 hours a week. Participants reported a broad range of experience from 6 months to more than thirty (30) years. Of the recorded responses (n=12), eleven participants indicate experience exceeding five years. Nine participants recorded experience of more than ten years.

80% of participants had completed *generic training*, whereas none of them had completed MATOD related training. 53% of the participants reported that they had undertaken *health and wellbeing* training. The *other*

training that the least number of participants had undertaken was retail and customer service-related training. Though none of the participants had received MATOD specific training, 53% of the participants had served MATOD consumers (Table 2). Some of the tasks they recorded were related to processing payments and processing scripts for MATOD consumers.

Pharmacy related training	Generic training completed?	Yes	12	80%
		No	1	7%
		Incomplete answer	2	13%
	Specific training completed?	ORT	0	0%
		Oral health	5	29%
		Health and wellbeing	9	53%
		Other	3	18%
MATOD awareness	Participants aware of ORT program?	Yes	12	71%
		No	1	6%
		Incomplete answer	4	23%
	Participants served MATOD consumers?	Yes	8	53%
		No	5	33%
		Incomplete answer	2	13%

Table 2. Participants representing data on pharmacy-related training and MATOD awareness in location B

Comments on the need for further education to assist pharmacy work

In response to the field “Can you comment about any need for further education that will assist in your work in a pharmacy?”, thirteen (13) participants recorded some of their thoughts regarding further education. Most participants reported a desire to gain a greater understanding of the program or a need to have access and use of as much information as possible. Several of these participants noted the changing pharmacy industry including the need to “stay up-to-date” with regulations and products. Three (3) addressed MATOD specifically although only one (1) participant provided details such as “a better understanding of the steps and requirements someone on MATOD have to take” and “knowing how successful this MATOD programme is in rehabilitating people”. One (1) participant who mentioned MATOD noted that “we are not allowed to deal with the ORT category customers”. One other comment indicated “customer aggression/abuse towards pharmacists” as an area of possible training but it is uncertain if this is for general client base or ORT clients specifically.

Points of comparison and key insights from pre-workshop surveys

There are a number of similarities in terms of demographics, education, training and MATOD awareness between participants attending workshops at location A and location B. There are also interesting differences with regards to education, training experience and knowledge of MATOD. In both locations, majority of the participants were female, however their educational qualifications varied significantly. In location A, the majority of the participants (40% and above) had completed Year 12 whereas in location B it was only 26%. Other differences related to part time and full-time work hours. In location B the majority of the participants worked more than 35 hours a week. In terms of work experience, the majority of the participants had more than 5 years of experience.

An interesting finding that emerged across both locations is the lack of MATOD awareness training and the very similar exposure of pharmacy staff to servicing MATOD consumers. This finding is significant from two perspectives, namely, the overall lack of professional training opportunities for pharmacy staff and secondly, the lack of research on the impact of professional education and development among pharmacy staff.

Another feature of the findings concerned the answers provided to the open-ended questions. Participants at both locations highlighted the lack of education/training opportunities and an overwhelming desire to receive training related to opioid dependence. In particular a few participants in location B were interested in understanding the pharmacological/therapeutic intervention as well as the social determinants that go with MATOD. At least one participant was cognisant of the stigma and discrimination associated with opioid dependence and wanted to know more about it.

In conclusion, the pre-workshop survey hints to the lack of training opportunities afforded to PAs and PDTs and the urgent need to tailor specialised opioid dependence training to PAs and PDTs who are currently servicing customers without any formal training.

Post-workshop survey findings

This section is divided into two parts that comprise post-workshop survey findings for location A and location B.

Summary of post-workshop survey findings in location A

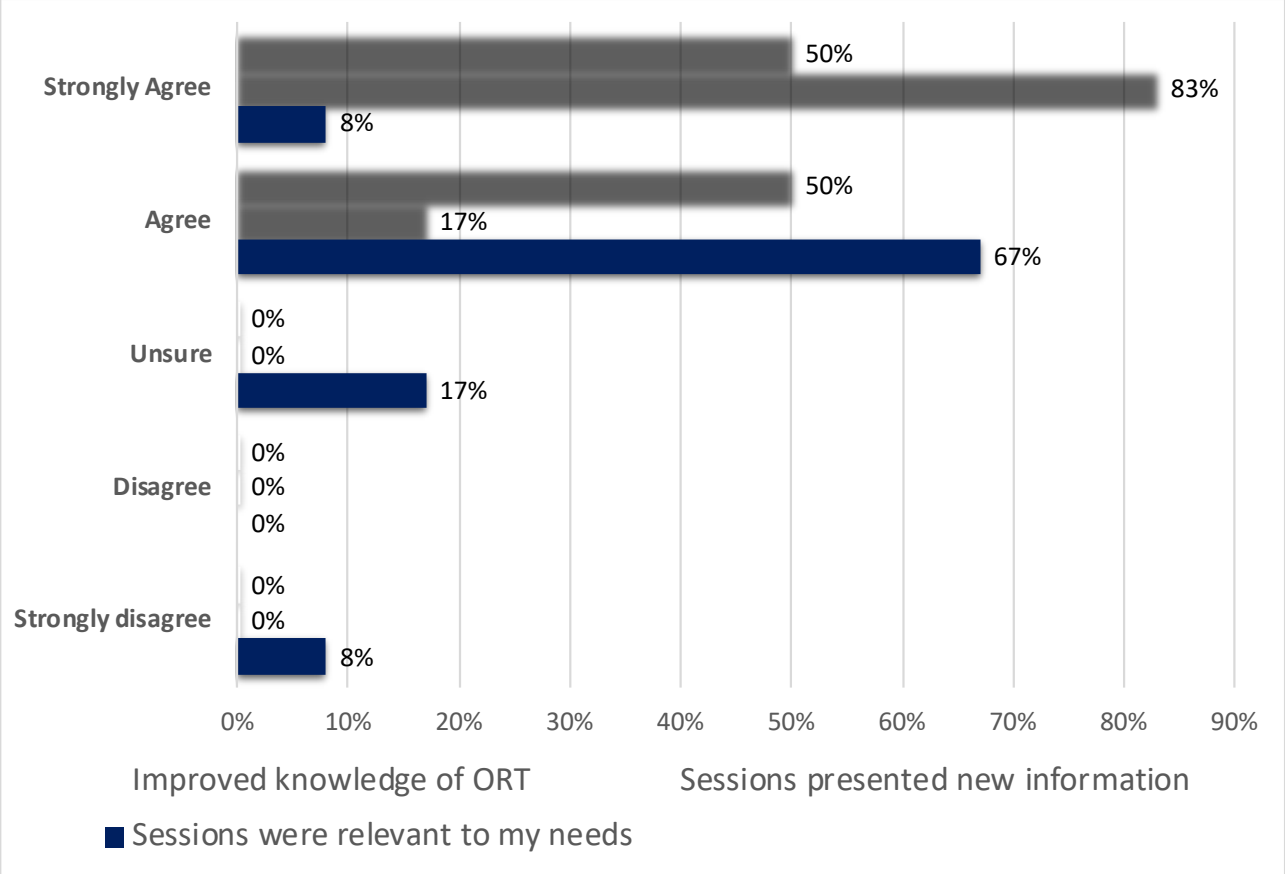

Figure 1. Participant responses to questions relating to knowledge of ORT, relevance to staff needs and new information identified in the workshop

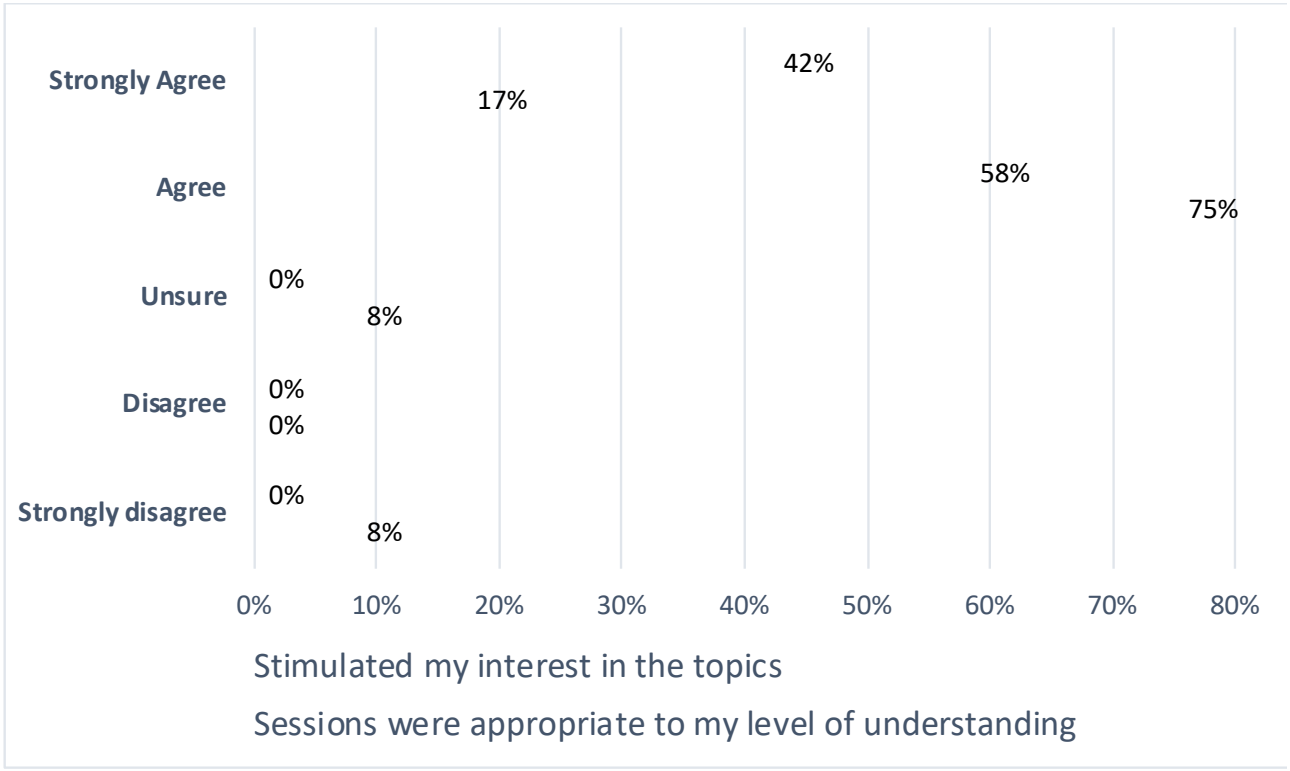

Figure 2. Participant responses to questions relating to stimulating interest in the topics and appropriateness to staff's level of understanding

Participant Evaluation and Feedback Summary

Post-training evaluation surveys were administered to participants after each training session. 11 participants filled the surveys after each session in location A. The questions relate to (1) the relevance of the session, (2) if they were presented with new information, (3) the appropriateness to their level of understanding, (4) if the session stimulated their interest in MATOD and (5) improved their knowledge of MATOD.

The majority of the participants, 8% and 67% strongly agree and agree respectively, felt that the training workshops was relevant to their needs at work (Figure 1). All of the participants reported that they learnt new information about the program and consumers (Figure 1). Others (58% strongly agree and 42% agree respectively) felt that the training workshops, stimulated their interest in MATOD and knowing more about it (Figure 2). As noted previously, many of the participants had previously undertaken customer service training and when asked if the training assisted them with strategies to improve their customer service, 83% strongly agreed, whereas the remaining 17% agreed. In relation to the question on the appropriateness of the learning materials to their level of understanding there was agreement among 75% of the participants that it was appropriate (Figure 2).

The post-workshop surveys had open ended questions that directly related to the efficacy of the learning materials and suggestions on improving the learning resources in the workshop. The responses of participants can be categorised into four board themes:

a) SDH

b) Furthering knowledge
c) Efficacy of training
d) Implementing changes in practice

SDH

Participants reported that the training increased and improved their understanding of the social determinants that impact on MATOD consumer's health and wellbeing. Several participants noted that they were not aware that MATOD patients often enter due to circumstances such as "addiction" to prescribed medicines. Most of the participants felt that their own attitudes of stigma and discrimination associated with MATOD consumers were challenged by the training, notwithstanding a couple of responses that couched MATOD consumers in negative language.

Respondents noted that clients on MATOD are not necessarily there by choice, that there is uncertainty regarding their circumstances and that clients have social and environmental factors that challenge their control. Several respondents also took a client specific focus by noting that the MATOD client themselves may feel uncertain or uncomfortable with the MATOD program. Some problems regarding respect and judgement are also raised as being addressed by the training.

Furthering knowledge

Participants were very keen to increase their knowledge and be exposed to further training about the psychosocial impacts and their connection to the MATOD program. A few participants indicated a desire for new knowledge regarding methadone and suboxone as well as DD (drugs of dependence). Others were also interested in knowing how consumers reacted to MATOD treatments. Interestingly, despite the aim of the training to embed the integral relationship between SDH and MATOD treatment, participants might understand the SDH as separate from their immediate concerns during interactions with clients. Such issues of relevance will benefit from increased attention in training.

Efficacy of training

Participants couched the efficacy of the training in terms of how it increased their awareness of social factors that impact on MATOD consumers. A few were challenged to examine the stigmatising attitudes towards opioid dependence. At least 3 participants felt that knowledge of SDH meant they "learnt more about stigma and what and how it affects people. Following on this theme, another participant noted, "it was great to understand the 'background' of some of our methadone patients. It's not always what you think." Others' comments related to the different types of stigma and the varied ways in which it impacted MATOD consumers. In particular, they were interested in how "stigma" "comes with the [ORT?] program", and the "types of stigma".

Regarding the efficacy of training, one participant notes difficulty in interpreting questions in the training: “some were a little hard to interpret”. The participant requests “better worded questions”. Another participant noted “I wasn’t exactly sure what the workshop was going to be about… I may have not received all info”. Other suggestions included the importance of case studies and their value in better explaining the lived experiences of MATOD consumers as well as the length of the training workshops. One participant indicated a desire to move from fortnightly training to “4 consecutive weeks”, another suggested increasing the length of the training workshops and making minor improvements to the training workshops in terms of better scaffolding of learning materials and introducing the information more clearly.

Implementing changes in practice

Participants reported the impact of training on their practice by addressing the stigma and discrimination associated with MATOD program. For instance, one participant indicated they learned “not to judge people as you don’t know what background their [sic] from”. Another indicated “people are people – don’t treat them different”. One comment regarding stigma of clients in MATOD that have entered due to prescription also noted “they feel judged”. Comments generally addressed learning from increased awareness and understanding of patients and many posited implementing changes in their service due to this. Two participants directly addressed this by noting they learned about “interactions” with MATOD clients, or “how to interact with these consumers in an appropriate manner”.

The strong endorsement of the use of case studies and the focus on client interactions, including the noted persistence of stigma in the program, indicate that participants are learning ways to interact with ORT patients through “understanding”, with compassion, without judgement, and in an “appropriate manner”. It is reasonable to interpret from this that participants are aware of ways to implement this training in practice.

Summary of post-workshop survey findings in location B

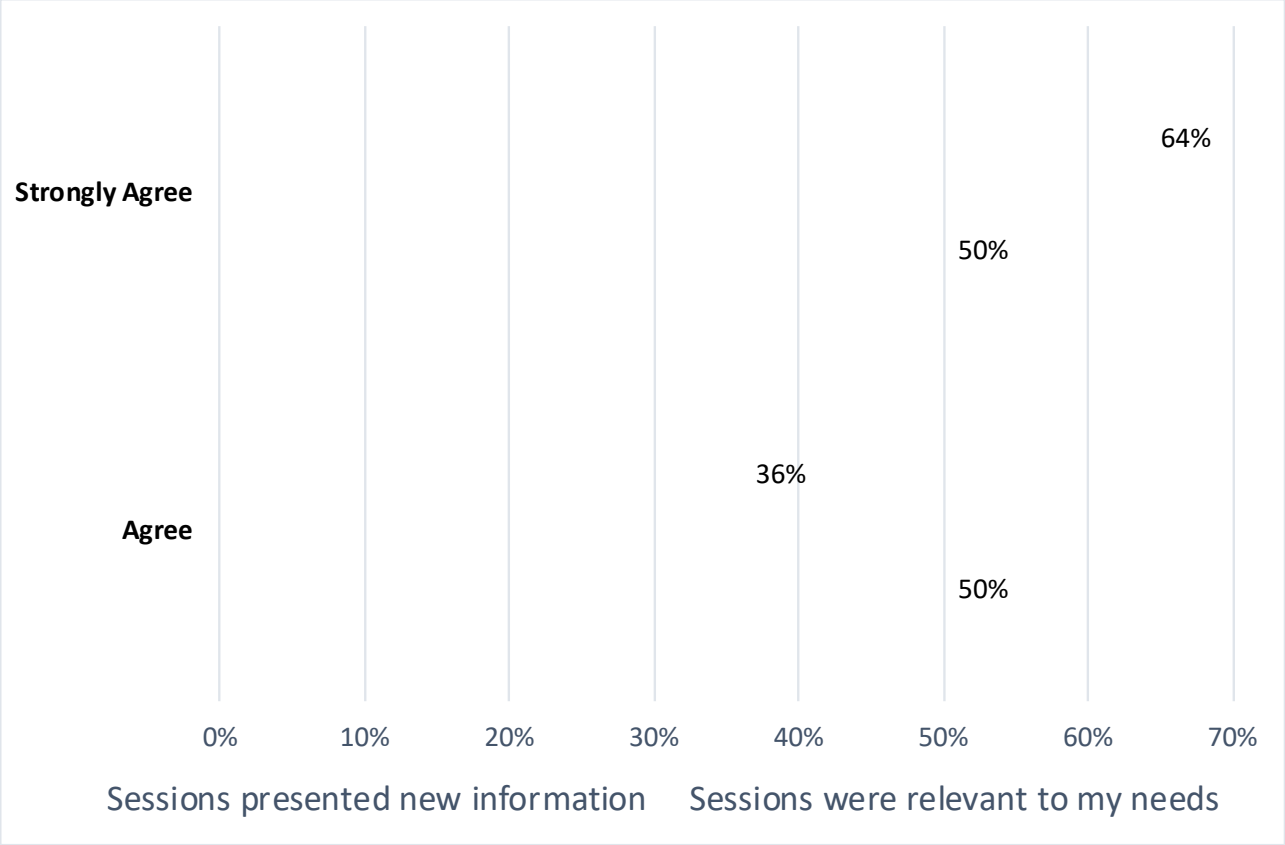

Figure 3. Participant responses to questions relating to sessions that presented new information and relevance of session to staff needs

Participant evaluation and feedback summary

At location B, the post-training evaluation surveys delivered varied results. Fourteen and twelve participants attended the first and second workshops, respectively. Both locations A and B employed the same questions in the post-training workshop surveys.

Fifty percent (50%) of the participants strongly agreed whereas the other 50% agreed that the training was relevant to their professional needs. 64% strongly agreed that they were able to learn new information from the learning materials (Figure 3). Fifty percent (50%) of the participants strongly agreed that the training stimulated their interest in MATOD and its link to SDH. Interestingly, an even larger number of participants (64%) strongly agreed that the training improved their knowledge of MATOD. When asked if the training improved their knowledge of customer service, 57% and 43% strongly agreed and agreed respectively. There was also strong agreement that among participants (64%) about the appropriateness of the learning materials.

Participants' responses to post-survey open-ended questions responses suggest similarities in the themes. They are categorised below:

a) Efficacy of training
b) MATOD and SDH

Efficacy of training

The written responses in the post-workshop survey indicate that the training was positively received, and the material was relevant. Participants indicated they gained new knowledge regarding the function of opioids and the link between opioid dependence and SDH.

The written responses indicated an increased interest in knowing more about the pharmacological functions of the MATOD program. One participant suggested that the training could have presented more information on “the actual ‘methadone’ + ‘suboxone’ dosing/regulations [contracts]”. Another suggested requiring “more information about the methadone + suboxone instead of focusing on the determinants mainly”. Several other participants suggested they would have liked more information about the comparisons and subtle differences between different MATOD treatments.

MATOD and SDH

Participants couched their learning of SDH as “interesting” and a “fascinating area”. An interesting pattern that emerged in the comments relates to the way participants were able to link opioid dependence with SDH. For instance, one comment distils some understanding by noting that SDH are “relevant to everyday life” whereas another explains how “social standing of people in the community [affects] their outcomes with health issues”. This comment appears to be in accord with a basic definition of the SDH. Another comment notes “treat the causes, not the disease” and “improve population as a whole by prevention”. This certainly indicates an emerging understanding of how social, environmental and economic causes affect the health and wellbeing of consumers subscribed to the MATOD program.

Another interesting finding was the ability of the participants to make connections between SDH, stigma and opioid dependence. For example, one participant reported, “getting people on board to help people on [the] ORT program e.g. doctors & pharmacists”. Others reported, for instance, “greater in-depth learning on stigma and discrimination, on inbuilt bias”. In fact, majority (n=10) of the participants mentioned stigma and/or discrimination as a positive learning outcome from the training. Language such as “interesting” is observed, although a few qualified their learning in detail. One participant indicated that they learned “to be a little more open minded!”, while another learnt about “repercussions of stigma”. These observations serve to be valuable since they demonstrate critical reflection on practice. One participant detailed his/her learning on SDH by reflecting on “health layers/causes” including “education, poverty, abuse”. The same participant also notes stated “prevention better than cure”. Other observations from participants that acknowledge, even if gesturally, the social determinants of health include language such as “social [and] economic status”, “environmental circumstances”, and “social determinants”.

Points of comparison and key insights from post-workshop surveys

Participant responses suggest a number of similarities across the areas of relevancy of the training to professional needs, presentation of new information, improving knowledge of MATOD, stimulation of further interest in MATOD program and consumers and the appropriateness of the training in terms of the learning materials across locations A and B. Majority of the participants, 67% and 50% respectively in the first and second surveys, reported that they felt the training met their professional needs. Similar findings relate to the question of whether the training stimulated their interest in MATOD program and MATOD consumers. 58% and 57% respectively strongly agreed that the information presented provided them knowledge of opioid dependence and its link to SDH. The capacity of participants to make these links is more prevalent in the responses to open ended questions which we will return to shortly.

Another finding relates to the strong agreement among participants in locations A and B about the improvement the training had on their capacity to build on their customer service skills. For instance, 57% and 83% of the participants agreed that it improved their skills in assisting customers. This is an interesting finding because most of the participants who attended the training workshops in location A and location B had undertaken retail and/or customer service training, whereas few had completed specialised training in MATOD. In relation to SDH, participants were able to articulate clearly the importance of systemic and contextual factors that impact MATOD consumers. Some of them were surprised by the varied pathways into 'opioid dependence'. This learning expressed by the participants indicates that the participants were starting to challenge their own understanding of MATOD consumers, and the stigma associated with opioid dependence and secondly it also emphasises the lack of MATOD specific training opportunities available to PAs and PDTs.

It can be alluded from these responses that knowledge of MATOD program, the link between opioid dependence and SDH and stigma and discrimination allow PAs and PDTs, to better understand the broader circumstances of MATOD consumers. This also by extension makes pharmacy staff more cognisant of the impact these factors might have on MATOD consumers and their behaviours in the pharmacy setting.

Another significant learning that came from the participant responses was their engagement with the training materials and their efficacy. Majority of them believed the training materials were appropriate to their level of understanding and further stimulated their interest in knowing more about MATOD program and MATOD consumers. Interestingly, the open-ended questions provide deeper insights into participants challenging existing understanding of the MATOD program. It had an impact in terms of they are reflecting on their professional practice. This finding suggests the need to develop industry wide training modules that combine and integrate knowledge of the pharmacology with SDH and the associated psychosocial impacts.

In summary, the pre-workshop and post-workshop survey responses suggest there are at least two common themes. One relates to their current roles/responsibilities and opportunities to undertake specialised training in areas, such as MATOD program and MATOD consumers. The second theme relates to embedding the psychosocial and pharmacological aspects of the MATOD program. The key insight from the training

suggests that participants were particularly challenged and developed new knowledge about opioid dependence. This highlights the need to tackle the psycho-social, pharmacological and negative perceptions that inform opioid dependence.

Interview findings

This section summarises the in-depth qualitative interviews with PAs and PDTs who attended the training workshops[3]. The responses have been categorised into three broad themes:

1. Professional roles and responsibilities
2. Efficacy of training
3. Implications of training for professional practice

The themes were identified and coded based on interpretative phenomenological method (Hammond et al., 1991; Darbyshire et al., 1999). In the following sections each of these themes are discussed.

Theme one: Professional roles and responsibilities

Theme one was generated when participants were asked to *"tell us about their knowledge of MATOD and experience of dealing with consumers of MATOD"* prior to the training workshops. The responses can be categorised into three sub themes, firstly, perceptions about professional roles and responsibilities, secondly, perceptions of stigma and discrimination, and lastly, narratives challenging stigma and discrimination.

This theme emerged when participants were asked to describe their experience providing customer service to MATOD consumers. 8 out of 10 participants couched their experience of working with MATOD consumers through the lens of professional responsibilities and roles. They made references to the way the MATOD program was set up and the fact that only pharmacists were allowed to administer the drugs. While participants had a limited role in the dispensation of medication, they understood themselves as primarily a conduit between the pharmacist and MATOD consumers.

Perceptions and professional roles and responsibilities

[3] For the purposes of this research, when we use terms 'majority we mean 5- 6 participants. When we use ''few' we mean 1-2 participants. When we mean some, it refers to 3 to 5 participants. We conducted in-depth qualitative interviews with 10 participants who attended training workshops from location A and location B. 6 were from location A and 4 were from location B.

Participants often noted that pharmacists and dispensary technicians had more hands-on roles and responsibilities in the pharmacies. This comprised of dispensing and administering prescription medication or shepherding MATOD consumers. Some excerpts below speak directly to the differences in the professional role between participants and pharmacists:

> "I don't deal with them on a personal level or on a regular basis because I'm not part of that pharmacy side tech[nical]… thing. I just give scripts or hand out scripts and take in scripts"

> "they will speak to a pharmacist or we will then say look, this is probably something you need to speak to the pharmacist about".
>
> "we don't have a lot of interaction with them".

A few participants suggested that their professional roles impacted on the type of interactions they had with consumers. For instance, one participant suggested they "are not allowed or supposed to interact with any sort of things with these ORT customers". Two others noted it is not part of their professional role to provide any advice on their medication and this restricted the type of interaction they could have with MATOD consumers. Despite these barriers as well as no formal training related to MATOD program, 5 out of 10 participants interviewed relied on a range of intuitive and informal interpersonal skills to build rapport with the consumers.

The following excerpts demonstrate this:

> "We'll serve them at the counter and they'll just say that they're here to see the pharmacist".
>
> "I worked on the register but I did come face to face with a lot of the people and so I did kind of build up a rapport with some of them".

Additionally, participants referenced different strategies they used to interact with consumers. They included greetings, remembering first names, social interactions about sport, their family and enquiring about their general wellbeing. Some of the following reflections demonstrate this:

> "I'll always walk past the window and say" Hi, how are you going, and I will give them the same courtesy as I would someone who is at the counter".
> "Some you just know the families and you know they might have grandchildren; you just talk about the children…"

Participants narrated in detail the meaningful and supportive professional relationships they had built with MATOD consumers over a period of time. The following excerpts illustrate this:

> "I was able to talk to her and encourage her to find someone that she could trust to have a chat to or go to her doctor or something like that … she came back a few days later and thanked me for listening to her".
>
> "we had once a patient that couldn't actually get housing [unclear] and was living in a tent at the local showground … once the girl served him they gave him the box of goodies".
>
> "we had something to talk about every day because I'd comment on what runners he was wearing and he would comment on what I was wearing. That was how - that was our path to being able to start talking…A way to connect".

The aforementioned experiences of participants suggest that building meaningful relationships with MATOD consumers through interactions mattered to them even though they had not received a formal training related to MATOD program.

Another barrier highlighted by a few of our participants was the varied interpersonal skills that a few pharmacists had in terms of engagement with MATOD consumers. To illustrate:

> "some pharmacists are a bit rude and just tell them (consumers): wait we've got other people; you'll just have to wait last or come back in half an hour; which I think is wrong".
>
> "they're (pharmacists) very intelligent people but they don't have common sense, a lot of them. If they just stop what they're doing, deal with that person, get them out of the store, the situation is then deescalated".

In summary, the narrative experiences of the participants suggest that their role description and the physical setting of the pharmacy might constrain them from having sustained engagement with MATOD consumers. This theme shed light on the fact that despite having no prior professional training dealing with MATOD consumers, pharmacy assistants and technicians used their intuition and interpersonal skills to develop meaningful relationships that lessened the anxiety among MATOD consumers, while at the same time balancing the demands of their professional role in the pharmacy setting.

Participants' perceptions of stigma and discrimination

When asked to describe their knowledge of MATOD program and their experience of working with MATOD consumers prior to the workshops, the participants used a range of terms. Some described the consumers as 'just normal people', 'amazing', and 'fantastic'. Others described some challenging interactions they had with MATOD consumers using terms such as 'disruptive, abusive' 'rude', and 'aggressive'. The mixed responses reflect the challenges of working with MATOD consumers as well as broader community discourses that reflect negative perceptions of opioid use and MATOD consumers.

Another interesting feature was the way MATOD consumers were perceived by the participants. For instance, one participant noted, "These people, they come. They stand there… especially, these kind of people". This can be further illustrated in the following excerpts:

> "I always just kind of thought or assumed that it was just drug users - illegal drug users that were on it".
>
> "they do the wrong thing".
>
> "so that people can then go about their daily lives without having to break the law by using an illegal drug. Then can try and get their lives back on track".

In addition, one of the participants when describing an event noted, "some of them are just downright rude and angry and we need to watch them like hawks because they do shoplift".

Three of the participants suggested MATOD consumers were 'standoffish', 'rude', 'aggressive' and 'abusive' when they had to wait in the pharmacy for the medications to be administered. One of the participants, felt the consumers needed to be watched, while two others noted their behaviours caused discomfort in the pharmacy seating. This framing of MATOD consumers in the pharmacy setting as deviant and in need of supervision is illustrated through the proceeding excerpts:

> "those who work in the store… have to be a bit careful to them, to keep an eye for them, these people".
>
> "What I notice they are not at all interested in talking to other people".
>
> "they are in their own little world some days".
>
> "sometimes they are a little bit hesitant and don't stand up close to the counter".
>
> "I'm usually on the side of the druggie before I get to know their real story".

To summarise, a few participants' reflections on MATOD program and consumers suggest stigmatising responses. They also used other 'framing' techniques, such as 'needing to be policed' and 'needing supervision' that associated behaviours of MATOD consumers with social stereotypes and negative portrayals of drug use.

Participants' narratives of challenging stigma and discrimination

In contrast to the above, one third of the participants were aware of the discourses of stigma and discrimination associated with MATOD program and the impact on MATOD consumers. Participants used expressions, such as 'not judging a book by its cover', 'treat everybody the same', and 'not passing judgement' which indicated their knowledge of stigma and discrimination associated with MATOD program.

One third of participants revealed how personal and professional values intersected in their work with MATOD consumers. The excerpts below suggest that 'treating people with respect' was important in engaging with MATOD consumers:

> "I'm fine with them because I try and treat everybody the same… we are a hard-working family"
>
> "not passing judgment on the appearance of the person or the way they act".
>
> "It's just basically being aware that everyone's obviously a human and we don't know each others' environment. We can only take a person on face value so just treat everyone equally".
>
> "I've also come from a life where you don't judge people, you just treat them with respect."

Similarly, a few participants acknowledged how their own experience of having close family members using drugs shaped their understanding of stigma and discrimination:

> "Having suffered from depression and anxiety myself before, I feel like I can kind of relate to people on some level".
>
> "I have a son that is a recovering addict, so I also believe that no one knows what's led someone down that street or down that road for them to get into that situation where they have to use it… for me, stigmatism is a very big thing and I'm very careful about who I say that to because people are very judgemental".

Three of the 10 participants shared insights on the strategies they used to mitigate the negative impacts on MATOD consumers in the pharmacy setting and. One participant noted, "they felt that they were being judged and they felt uncomfortable a lot of the times coming in. So, I just probably make more effort to say hello and smile and talk to them rather than what I did before".

Similarly, other participants revealed how stigma played out in the pharmacy setting. They acknowledged MATOD consumers anxiety, hesitancy and feelings of being watched and judged. For instance:

> "I know it's hard for them sometimes to walk in. It's busy and they don't want to be seen by people and what not…. I try and get them done as quickly as possible so they're not feeling uncomfortable".
>
> "They'd probably, if they're not being helped promptly, they'd probably think that person's looking at me, probably feel intimidated if some people give them dirty looks or whatever. So, you try and make them feel as comfortable as you can and just help them as quick as you can".

Other participants identified potential barriers for MATOD consumers such as the 'use of windows' or 'designated private dosing areas'. They noted that:

> "there are some people that treat them differently because they are on methadone or they are at the window, there is a stigmatism. People who are in the store look and they go, oh, is that the drug users window?"
>
> "I wouldn't want to be at that window. I feel like it's - people who are in the pharmacy look at the people who are at the window in judgement. I would not want to be at this pharmacy, if I was on the program, at that window because I think it's a bit shit. I've heard some of them say it. They don't like going to the window. They think it's shit enough. They don't want to have to stand there for like 15 minutes waiting".

To summarise, one third of the participants recognised the varied and subtle ways in which stigma and discrimination played out in the pharmacy setting. Some participants reflected on how their own experiences impacted on the treatment of MATOD consumers in the pharmacy setting, while others were very aware of the broader societal discourses that framed community attitudes towards drug use. Consequently, this group were more equipped to treat MATOD consumers respectfully in the pharmacy setting.

To summarise, theme 1 broadly, it presents a mixed picture in terms of the understanding of stigma and discrimination associated with the MATOD program and MATOD consumers. The key insight gained is that societal discourses of stigma and discrimination play a significant role in the MATOD program and this impacts on the way MATOD consumers are treated in the pharmacy setting. More than one third of the participants held negative perceptions and/or pre-judgements about MATOD consumers and demonstrated this through using 'distancing language', such as 'them and they'. They also apportioned blame on MATOD consumers for their circumstances and felt they needed to be watched and supervised in the pharmacy setting. In contrast, one third of the participants had a very different approach to MATOD program and consumers. They demonstrated understanding of stigma and discrimination associated with drug use. They used this to mitigate the negative impacts on MATOD consumers in the pharmacy setting.

Theme two: Efficacy of training

This theme broadly relates to the reflections of the participants on the learning from the training and can be categorised into four sub-themes:

- Developing understanding of the social constructions of health
- Reflections on case studies used in the training
- Experiences with the training module and its learning materials
- Participants' suggestions on improving training

Developing understanding of the social construction of health

The participants reflected on the training material in interesting ways. Majority of the participants reflected on the awareness they gained about the role and impact of systemic factors on health and wellbeing of MATOD consumers. Others were able to use the learning from the training to challenge their personal and professional values. To illustrate this, see below excerpts:

> "the financial, domestic relationships, there were a few other things but yeah, we did, we learned about those".
>
> "it could be environment or it could be their upbringing, or it could be poverty; it could be religion; it could be poor - it could be isolation, like for example, living in a small rural country; not having access to certain things like Headspace, which is basically a government-funded thing for people to go and speak to counsellors".

Two participants were able to narrate powerfully the interplay between structural inequalities and individual circumstances and its connection to wellbeing. This is demonstrated in the following excerpt:

> "I've always been a big believer in treating the cause and not the symptoms. I guess the social determinants of health is all about that. We look at why people are the way they are, rather than just giving them a Band-Aid or a tablet to fix it. That probably explained the whole - system that was explained should be how we're - how our health policies - how that all works, really. It doesn't seem to be, really".

Another feature of the reflections was the recognition among the participants of the tensions between the impact of systemic issues on MATOD consumers and how to mitigate the 'judgment' associated with MATOD program in their interactions with consumers in the pharmacy setting. One participant highlighted this tension clearly when they noted, "trying to understand where they've come from which is still the same as judgment, I think, because we don't know their story but we were taught that maybe they grew up here and maybe they grew up with that or this is what maybe happened". The other participant was concerned

about the uncertainty of being in a position of not knowing the consumer's pathway into the MATOD program and not wanting to judge. The tension between this is highlighted in the excerpt below:

> "Whether it's either led them to be on the program with illicit drugs or whether it is prescription drugs, you don't know. You don't know until you talk to someone and who is it for anybody else to judge… Well, you don't know. I mean they might have lost a job, they could have lost a family member, they - you just - there's that you don't know. You just don't know what's led someone there".

Two participants stressed the limitations of stereotypical thinking about people on the MATOD program:

> "I was interested to hear about people that were professional people on the methadone or suboxone program. Drugs are - what's the word - drugs can happen to anybody. So, it's not just people that come from bad backgrounds or low-income families or things like that. It can happen to anybody".
>
> "You can be a well-off person and addicted to it, it doesn't have to be someone that's poor either".

Participants' assumptions of MATOD consumer and drug use were also challenged through the information presented in the training. For instance, one participant noted, "You'd like to think that you're very unbiased and don't have any prejudices at all but every now and then you get tripped up very well and you think, oh, geeze, I didn't know I did that or thought like that. It's brought out to play".

Similarly, other participants revealed powerful insights they gained not only about their own assumptions but also but new professional insights about the MATOD program. This is illustrated in the following reflections:

> "I knew people were addicted to prescription medication… and it's not just an ice or heroin or any of those, it can be a Panadeine Forte, it can be an Endone, it can be in Oxycontin".
>
> "the general public think that people who are on the ORT program are illicit drug users and that's all that they are. They're not… I've told a couple of my friends that no, it's mostly prescription use and that's why they're on it. They're always surprised – always".

One participant was surprised to learn that consumers under MATOD were unfunded and therefore incurred out-of-pocket expenses. This led the participant to reflect from the consumer's standpoint as demonstrated below:

> "I didn't realise for a start they didn't get help financially to go on these programs, it's like to pay out of their own pocket. A lot of them aren't working, which must be very difficult for them to get treatment, that side of it shocked me a little bit. I thought there might be some help for them because they're trying to help themselves. Hopefully that changes in the future. I think that was one of the biggest things. A lot of pharmacies won't help these people either, it's only certain pharmacies that offer treatment, which I think is fairly ordinary".

To summarise, the training allowed most of the participants to recognise the importance of systemic factors on individual health and wellbeing and, in particular, how it played out in the context of MATOD consumers. Others were able to take a step further and explore how this training challenged their own assumptions and/or values around MATOD program but also the stigma and discrimination associated with 'illicit drug use'.

Reflections on case studies

Majority of the participants reflected positively on the case studies that were delivered as part of the training. The relevancy, relatability and currency of the case studies was something that the participants found valuable. For instance, the following excerpts illustrate this:

> "It was fantastic again, delving into the relevance of why things have happened. The social things, the environmental".
>
> "But the scenario created that must be the real things happening in Australia or in our society. So, that gave me some insight that this is not … a lot of things are happening. Especially, in the person's environment, socially, family, economically. A lot of things involved in that. Especially, those who are undergoing this kind of treatment or therapy".

Other participants reflected on the educational value of the case studies. One participant noted, 'definitely a good tool to use'. Three of the participants felt the case studies allowed them to critically examine their own assumptions and the way that influenced their professional practice:

> "just how everybody just immediately jumped to the wrong conclusion and they had no facts. That's what shocked me, I think. I know it's only what we're talking on paper, but it probably happens in real life, so that was a good one, it made me think about how that person would feel being judged and so forth".
>
> "It was quite interesting talking about some of the case studies and people realising that they had a bit of a bias or a - would discriminate without even realising that they had it
> "before the training I just assumed, oh they've done something bad, they've been on drugs, that's how they got here".

Another feature of the case studies was their relatability to the lived experiences of some of the participants. The impact of the personal connection and the insights gained on their professional practice is explained by a few participants as illustrated below:

> "Well there's a lot of factors why you would look tired at a school run. For example… there's been one or two days that I can't get my children to school … I've turned up to school still looking very tired or dishevelled and I think I understand that it's not always about drugs that you do turn up late to school for a pick-up or look tired… if people are judging, I think that's terrible to judge like that …".

> “you might identify with something in there. You hope the case studies are something that you, or as a participant, that you identify or that you see something in, or you think ah, that might be so-and-so in their everyday life”.
>
> “There was one of the case studies and it was about someone who had grown up in a broken home, or something. That kind of hit home for me because that was the same as my life growing up, I guess”.

In summary, participants commented positively on the educational value of the case studies. For some it was the relatability of the case studies to aspects of their own personal histories whereas others used this to critically reflect on their personal values and professional practice.

Experiences with the training module and its learning materials

Participants had mixed views on the learning materials delivered before and during the training. Some found them informative and challenging whereas others felt ‘intimidated’, and ‘sometimes confused’ by the material delivered. For instance, one participant noted, “it was an eye opener... I learned a lot of things... the material was good”, whereas another noted, “Some of the exercises we did, I felt, were a bit irrelevant and a bit above our heads”.

Many of the participants were able to reflect on the learnings they gained from the materials on the social constructions of health. The reflections of the participants on the materials suggest that not only did they gain new knowledge of social constructions of health but also reinforced what they intuitively knew. The following excerpts demonstrate this:

> “I didn’t know, really a great deal about the social determinants of health so I found that incredibly fascinating and I’d very much like to do more study on that but of course that’s not what it was all about”.
>
> “it was a bit interesting with the other staff and all. It was a bit of an insight to me… an insight about how the person who are on this program … are socially accepted, how other people think about the reaction … the workshop helped me”.
>
> “It was fantastic again, delving into the relevance of why things have happened.
> it broadened out what I perhaps already knew in myself that there’s a whole lot more - that there’s a great deal about why people make the decisions that they do and why there's health issues in the community that there is. It’s probably reinforced something that I didn’t really know that I knew”.

However, a few of the participants found the content of the training workshop irrelevant or unrelatable as demonstrated in the following responses:

> “I didn't realise that the first two weeks of someone being on methadone were the most dangerous because they have to get the doses right and things like that. I found that sort of stuff interesting. But the other stuff just felt kind of irrelevant”.
>
> “what’s that got to do with us? We can’t influence that at all and he did go on quite a bit about surgeons overprescribe and doctors overprescribe and we thought well, we can’t say to people in the scripts, are you sure you want this? So, we thought well what’s that got to do with us and we didn’t think it was aimed at us for the first week”.

Many participants attributed the challenges of learning new materials within the limited timeframe of the training. Some of the excerpts illustrate this:

> “I just wish there was probably another four or five weeks on it because we only just started to understand what they were trying to bring about”.
>
> “I think it needed to go for longer”.
>
> “we had so many questions and not all of them could be answered· it just felt like it was something that if the course had been longer, it would have been easier to grasp”.

In addition, participants commented on the teaching practices of the presenters. The presenters were described as ‘good’, ‘passionate’ and ‘informative’. The following excerpts demonstrate this:

> “demonstrators speaking throughout the training was a good idea; the speakers were really good”.
>
> “having a joke about things like that, it lightens the mood, so everyone was a little bit more chirpy then just learning about something that’s not the best”.
>
> “It was very informative, and they were there for questions if we needed them, so that’s always a strength”.

However, one of the participants noted pointedly the dangers of engaging with sensitive topics when she noted, “she found making the darkest of things funny in some way, which can be inappropriate and was to some people ...she didn’t always make sense but she tried to connect with everyone”.

In summary participant reflections on the learning materials was varied. While majority of the participants valued the training, they found the learning materials and content covered in the training challenging. The reasons they found the material challenging was because of the newness of the content, the complexity of the concepts and explanations and the limited timeframe in which the training was held. A few didn’t the training relatable or relevant as their role in the MATOD program is very limited.

Participants' suggestion on training

When asked to provide suggestions on improving or strengthening the workshop training, participants responded with suggestions related to involving pharmacists in the training, increasing knowledge about methadone and suboxone program. Additionally, majority of the participants believed that the training needed to be extended as illustrated below:

> "sometimes hearing from them is also a good thing. A real-life person that doesn't mind talking about it would be helpful, I think".
>
> "So definitely more training for more staff members - for more pharmacy members, definitely. I think that would be amazing and there were a few of us from my store and we all said the same thing; if everybody could do that training, it would be fantastic".
>
> "it's probably something that we probably need to speak with our pharmacists as to possibly giving info into what the whole program is about".
>
> "It was more interesting to learn about the different drugs and their effects and that sort of thing than to go over - to concentrate so much on the stereotypes…I think it would have been better to have learnt more about the actual methadone and suboxone".
>
> "probably five sessions would have been much better. I think the social determinants could have been week two or three and you talk about what we will be doing over the next couple of weeks".
>
> "I think if we had done another four or five weeks, we would have learnt a little bit more. Some of it was a bit rushed".
>
> "it would be nice to sort of know the chemistry behind it all and how people become addicted to these things, as well as how to treat them and how, when they come in what do you do with them."
>
> "I think maybe a little bit more information. I'd like to know the background of opioids and things like that".

To summarise, participants provided a number of constructive suggestions to improve and extend the training. These included extending time frames, exploring the practical details of how methadone and suboxone work.

To broadly summarise theme two, the efficacy of the training can be explained in three ways. Majority of the participants interviewed were able to make the link between the social constructions of health and its impact on MATOD consumers. Many of the participants increased their awareness of stigma and discrimination associated with MATOD program. Two-thirds of the participants used this knowledge to challenge their own vales/assumptions about MATOD program and MATOD consumers. Case study reflections demonstrated the positive aspects of using case studies as tools that were based on real-life stories to establish awareness and understanding about stigma and discrimination. This caused many participants challenge their biases when discussing the case studies. Additionally, some participants found the case studies resonated with

their personal life experiences. Conversely, some participants found the case studies to be far from real and did not feel comfortable in sharing their own life experiences. Participants' experiences with learning materials showed mixed findings about speakers' presentation skills, participants' abilities in understanding the content and the concept of the social determinants of health issues around the duration of the course and technical difficulties with the presentation.

Theme three: Implications of training for professional practice

This theme explores the degree to which the workshop had an impact on the participants' work in the pharmacy with MATOD consumers. This theme identifies two broad subthemes from participants:

- Participants appreciating some degree of impact upon their professional roles demonstrated through enhancing pre-existing strategies in the pharmacy with the MATOD consumer and changing perceptions (heightened awareness about MATOD consumers' feelings and circumstances) evidenced through participants' narrative.
- A smaller group of participants realising minimal or no impact upon their professional roles

The first subtheme reveals that the training workshop had measurable impact on the participants. This is evident in the way participants narrate the strategies they have implemented post-training to address or minimise stigma in the pharmacy. Some examples of the strategies they have implemented relate to actively seeking opportunities to greet, smile, be kind and referring to MATOD consumers using their names, as opposed to using third person address. These are evident in the following excerpts:

> "… it definitely made a difference on how I was to approach them or even approach them at all… how to be kind to them, how to make them feel comfortable… speaking quietly to them about their problems".
>
> "the workshop helped me… we as a customer service or as a human being, we have to serve each - I mean any customer … polite".
>
> "they did suggest that we name them if we know their names, to greet them as … and since then, they have responded very well to that".'
>
> "So, I just probably make more effort to say hello and smile and talk to them rather than what I did before".
>
> "it's taught me how to be kind to them, how to make them feel comfortable because obviously they're a little bit embarrassed about how they come in".

Some participants became more aware of notions of equality stating that they would treat all individuals, including themselves, as the same or equal. The following excerpts support this finding:

> “I just treat them like I treat anybody else really… Just treating everybody the same as I would like to be treated regardless of their background. Being empathetic, listening…”
>
> “I'm way more conscious to treat them exactly as I would a co-worker”.
>
> “I think I've just got a little bit more awareness for them, how they must feel. I just treat them the same, I'm just the same still, I'm not - just more aware of how perhaps they might feel”.

One participant adopted a supervisory role to survey staff members who may have treated or engaged in a conducted with others differently:

> “from what I've observed. No one is treated differently. I treat that Methadone patient exactly how I would treat that lady coming in just dropping off a script, or person wanting advice on something else. I don't treat them any differently, and I've observed our staff since this training, and no one is treating them any differently there. They're not ignored or anything like that, and I thought I'd take specific notice actually after the training, but no, I honestly say our pharmacy treats them very well. You'd want everyone treated the same, you don't want anyone singled out or made to feel uncomfortable or anything like that. So, hopefully that won't happen in our pharmacy”.

Some participants highlighted the change in perception about the MATOD consumers in attendance due to the workshop. This was described as being “more aware of how they feel”, “more mindful”, that it “changed” their way of thinking about MATOD consumers and that it “made” them “realise that people assume things”. Some participants made explicit comparisons by exploring before and after changes. The following excerpts demonstrate these findings:

> “possibly felt a little bit intimidated by them before… Think you don't know why they are in there, don't judge them. You don't know why they're there, it's none of my business”.
>
> “at first, I was very intimidated by them… But yeah, now they’re all – I find them all really lovely”.
>
> “the look of them and knowing before – before the training I just assumed, oh they’ve done something bad, they’ve been on drugs, that’s how they got here. But yeah, that’s not always the case, which is what the training taught us”.
>
> “always thought that they were in there for illegal drugs but now I know that there’s real people in there and - so I just see them as normal customers that they would be out the front”.
>
> “I'm more aware of how they feel. I've always treated people how I want to be treated but I'm now more aware of how they feel when they come in”.
>
> “it probably has changed my way that I think about them, in the sense that you obviously - you're empathetic obviously a bit more towards them, but look we definitely - we do have a bit of a soft spot, but at the same time [unclear] maintaining that professional level”.

> "It just made me realise that people assume that things are happening when they don't know the background history and what's actually going on".

One participant attested that he/she felt 'validated' about their pre-existing strategies employed at the pharmacy.

> "one thing I learnt from it was that I feel like I'm on the right track. I didn't feel like I learnt a lot, I just felt like I'm doing the right thing in what I'm doing. So, it felt good to know that".

As a part of gaining an increased awareness and understanding about consumers' feelings, some participants described their presumptions of what MATOD consumers may be feeling in the pharmacy. They referred to the MATOD consumers' feelings as feeling 'embarrassed', 'judged', 'uncomfortable', experiencing 'anxiety' and 'not being helped promptly'. The following responses demonstrate this:

> "it's taught me how to be kind to them, how to make them feel comfortable because obviously they're a little bit embarrassed about how they come in".
>
> "I think they know that the world knows that's where the drug addicts go - or the former drug addicts go".
>
> "they felt that they were being judged and they felt uncomfortable a lot of the times coming in".
>
> "if they're not being helped promptly, they'd probably think that person's looking at me, probably feel intimidated".
>
> "They think I'm a druggo, or they might have anxiety for coming in".

By contrast, a smaller section of participants reported that the training had no impact to the extent of changing or enhancing their approaches to MATOD consumers in the pharmacy.

To the question whether the training had any impact, we can identify a smaller set of responses from participants including 'not so much', 'no, none at all', 'nothing that I feel that I picked up that I could do different', 'to be truthful, probably not', 'as a pharmacy, no one's really changed', 'I don't think personally I've changed the way I've dealt with any of them, no' and 'I haven't actually altered the way I treat them'.

A participant described it as "nothing makes any difference" at their "level of staff" which alludes to the possible systemic barrier of hierarchical structuring of the workforce that may deter changes to approaching MATOD consumers.

To summarise, the workshop training produced impacts for the majority of the participants that informed their professional roles. With increased awareness about MATOD consumers' background, feelings and considerations, the participants adopted enhanced versions of their present, in-practice or pre-existing strategies to interact with MATOD consumers in the pharmacy. This was part of an effort to prevent discrimination and reduce stigma experienced by MATOD consumers. This active implementation differed

from the passive implementation finding where participants acknowledged increased awareness and being more careful or mindful about MATOD consumers but practised normative mechanisms of being non-judgemental and treating all individuals as equal. Some of the latter participants, concurrently, reported the training to be ineffective making the distinction that the only change that occurred within themselves was related to their awareness as opposed to change of practice or strategies.

To broadly summarise theme three, the most significant impact of the training, and one described by the majority of participants, is that of a heightened awareness around creating a more equitable and effective relationship with MATOD consumers. The training created a form of 'consciousness-raising' whereby many participants manifested greater awareness of the implications of speaking or acting in particular ways. This ranged from appreciating background and context - understanding the 'story' behind each MATOD consumer, to more practical strategies aimed at fostering an environment of non-discrimination. At its most productive, the training had the effect of creating knowledge around the social construction of health and an understanding around the implications of language-use, attitudes and behaviour. For those participants who evinced non-stigmatising values and practices prior to the training, the training helped validate their approach. For others, the training had the effect of altering understanding (and possibly) behaviours within the work environment.

Discussion

This discussion will contextualize the findings to address two aims: (1) to develop a training module for PAs and PDTs which explicitly integrates SDH with opioid dependence with the specific purpose of tackling stigma and discrimination and; (2) evaluate the efficacy of the training workshops using Fook and Garnder's (2007) critical reflection model.

In relation to the first aim, a previous study demonstrated the lived experiences of MATOD consumers and their perceived patterns of discrimination and stigma (Patil et al., 2018). The current project builds on this work with the purpose of alleviating experiences of stigmatization and marginalization for those accessing and using MATOD. This involves facilitating a change in practice, both in understanding and though practical encounters within the pharmacy setting. The change process involves providing contextual knowledge and professional development opportunities for PAs and PDTs to generate better understanding and efficacy in delivery of MATOD program.

The case for training is established by the literature which discussed the importance of the MATOD program within the context of opioid treatment programs, noting that the significance of MATOD lay in the direct integration of what can be broadly labelled 'social determinants of health' within treatment programs (AIHW, 2016; WHO, 2009). Unlike opioid replacement and substitution therapies, where SDH is regarded as additional to treatment (McAnally, 2018; Wood, 2018; WHO, 2009; AIHW, 2016) MATOD aims to directly integrate SDH with replacement or substitution therapy. This more encompassing approach has consequences in terms of the service provision and administration of MATOD in the pharmacy setting.

Indeed, while this connection is established in principle it is not necessarily integrated into pharmaceutical practice, particularly at service levels outside the professional pharmacist. Robertson, Bond and Matheson (2015) observe that while pharmaceutical care must "encompass notions of prevention of harm and facilitation of treatment adherence" (p. 639), current studies do not go so far as to acknowledge psychosocial support or dispensary awareness of SDH. The need to link SDH with treatment needs to be more systematically integrated into training and support programs within the pharmacy setting. In this context, the findings in the report suggest statistically significant numbers of untrained (in term of MATOD) PAs and PDTs serving MATOD consumers. The findings indicate that 100% of the participants who filled the pre-workshop survey did not receive MATOD training and yet an average of 55% of the participants who filled the pre-workshop survey served MATOD consumers, revealing a noticeable training shortfall within the pharmacy setting.

Prior to the workshop training, the narrative experiences of the participants suggest that their role description and the physical setting of the pharmacy restricted them from having sustained engagement with MATOD consumers. The findings reveal that most participants had completed generic training; significantly none had completed MATOD related training. Across both locations, there was a lack of MATOD awareness training despite the similar exposure of pharmacy staff to servicing MATOD consumers. This is significant from two perspectives, firstly, the overall lack of professional training opportunities for pharmacy staff and secondly, the lack of research on the impact of professional education and development among pharmacy staff. Notably much of the literature (Lea et al. 2008; Burns et al. 2015; Le and Hotham 2008; Peterson et al. 1999), that examines pharmacists' experience working with MATOD consumers, does not encompass the perspective of PAs and PDTs.

Participants at both locations highlighted the lack of educational/training opportunities and an overwhelming desire to receive training related to opioid dependence. This reflects the gaps identified in the current literature of training PAs and PDTs with respect to incorporating SDH principles. The paucity of training opportunities reflects the larger context where, as Patil et al. (2018), reviewing the role of community pharmacy and consumer perception in ORT, observe "most of the studies did not analyse better education for dispensers about the psychosocial needs of consumers of opioids and the need for holistic care that includes pharmacological, psychosocial and mental health interventions".

In the absence of professional training opportunities, it is not surprising that the findings present a mixed picture in terms of the understanding of stigma and discrimination associated with the MATOD program and MATOD consumers. On the one hand, one third of the participants demonstrated a constructive approach to MATOD program and consumers. This cohort revealed a solid understanding of stigma and discrimination associated with drug use, and often used this to mitigate the negative impacts on MATOD consumers in the pharmacy setting. Despite having no prior professional training dealing with MATOD consumers, PAs and PDTs used their 'intuition' and interpersonal skills to develop meaningful relationships. This lessened the anxiety among MATOD consumers, while at the same time balancing the demands of their professional role in the pharmacy setting. At the same time, three of the interviewees held negative perceptions and/or pre-

judgements about MATOD consumers, and this flowed through to the pharmacy setting where MATOD consumers were, at least partially constructed though regimes of discipline and surveillance.

Such a range of responses is to be expected in the absence of any formal training and bears out the finding that that societal discourses of stigma and discrimination play a significant role in the MATOD program and can impact on the way MATOD consumers are treated in the pharmacy setting. This discussion now turns to evaluate the efficacy of the training in facilitating change in professional practice.

Reflection on professional practice has experienced an increase in the last three decades in the health services, social work and teaching fields (D'Cruz et al., 2007; Fook & Gardner, 2007; Taylor & White, 2000). D'Curz at al. (2007) suggest that critical discussions of the role of practice and practice knowledge are intertwined with concepts of 'reflexivity' and 'reflection' in the literature. Whilst a detailed discussion about the differences between these concepts is outside the scope of this project, the design of the training workshop materials combines various features of Fook and Gardner's (2007) conceptualization of critical reflection. Fook and Gardner (2007) suggest critical reflection involves revealing the implication of language use and the power associated with words, linking this to broader societal discourses.

Fook & Gardner (2007, p.15) submit that critical reflection is a "process for unearthing these social aspects to individuals' lives". In fact, the majority of the participants interviewed were able to make the link between the social construction of health and its impact on MATOD consumers. Many of the participants increased their awareness of stigma and discrimination associated with MATOD program. Two-thirds of the participants used this knowledge to reflect upon, and indeed challenge their own values/assumptions about MATOD program and MATOD consumers.

In relation to this, Fook and Gardner (2007) refer to the process where people are able to unsettle their own assumptions and the broader societal discourses that shape their practice. The consequence of the training workshops, at least for most participants was to raise awareness of the SDH, thus addressing the need to integrate SDH within the context of treatment within the pharmacy setting. The findings indicate that the training allowed most of the participants to reflect upon the stigma and discrimination often associated with 'illicit drug use'.

It should be noted that these observations derived from training and interviews ought to not simply be seen as correcting' the erroneous assumptions of PTA's and PDT's, but instead such findings should be couched in a more positive light. The findings revealed how the majority of participants commented positively on the educational value of the case studies, with some participants noting how the case studies resonated with their personal life experiences, thus grounding and contextualizing their nascent attitudes and assumptions. The process of critical reflection which Fook and Gardner (2007) have conceptualised allows individuals to see how their assumptions are connected to broader values and discourses. This recognition creates an opening whereby new ways of thinking and acting are made possible. And through that recognition create new ways of thinking and acting.

This process leads us to examine the construction/contestation of values and attitudes during the training workshops. While the majority of the participants valued the training, they found the learning materials and

content covered in the training to be challenging. Some of these challenges however, produced an environment where participants, were able to respond to the contestation of values though altering their own practices. This is evident in concrete changes, such as participants' narration of strategies implemented post-training to address or minimise stigma in the pharmacy.

More broadly, the most significant impact of the training, and one described by the majority of participants, is that of a heightened awareness around creating a more equitable and effective relationship with MATOD consumers. The training enabled many participants to become aware of the implications of how they communicated with MATOD consumers. Training workshops and interviews created an environment where participants could reflect upon behaviors and practices within the pharmacy setting. Overall, the training had the effect of creating knowledge around the social construction of health and an understanding around the implications of language-use, attitudes and behaviour. For those participants who evinced non-stigmatising values and practices prior to the training, the training helped validate their approach. For others, the training had the effect of altering understanding (and possibly) behaviours within the work environment.

Returning to the two aims outlined in the beginning of this section, the integration of the findings reinforces the gaps in the broader literature in relation to the lack of coherent guidelines that define training of MATOD for PAs and PDTs. All of the participants indicated their lack of opportunities to undertake processional training. This current project illuminates the urgent need to develop professional training PAs and PDTs.

Despite no clear professional framework to underpin professional practice of PAs and PDTs many of the participants used intuition and interpersonal skills to work to develop meaningful relationships with MATOD consumers. Nevertheless, real gaps in knowledge and experience were evident in participants' accounts which can only be addressed through more systematic professional training and experience.

In relation to the efficacy of the training workshops on professional practice, what was overwhelmingly revealed was the fact that participants were able to link individual assumptions within boarder discourses and challenge their values around opioid dependence ('illicit drug use'). A few went so far as to suggest that they were able to notice how MATOD consumers felt uneasy and uncomfortable in pharmacy setting. They reflected on post-workshop strategies to mitigate stigma and discrimination of MATOD consumers. This suggests the transformative value of training module that is informed by critical reflection model on PA and PDTs.

Recommendations

Summary of the efficacy and impact of the training focused on stigma and discrimination

1. The effectiveness of the training workshops in terms of increasing knowledge of stigma and discrimination associated with MATOD was endorsed by majority of the participants, namely pharmacy assistants and dispensary technicians.
2. Case studies which were a critical part of the training modules were unanimously endorsed by the participants.
3. The training was able to increase awareness of the implications of using stigmatising language. Some participants specifically noted that they were able to recognise and learn about the stigmatising assumptions they had in relation to the MATOD program.
4. The training was effective in terms of the participants being able to implement strategies to lessen the anxiety of MATOD consumers in the pharmacy setting.
5. The training had the effect of altering understanding (and possibly) behaviours within the work environment.

Recommendations for future professional training

1. Pharmacy Assistants and Pharmacy Dispensary Technicians to increase knowledge and raise awareness about stigma and discrimination associated with the MATOD program.
2. Explore strategies that target, both, professionals and the broader community to tackle issues of stigma and discrimination associated with the MATOD program.
3. Develop training modules that integrate social determinants of health with knowledge of MATOD program.
4. Consider rolling out the training modules across Victoria to a range of health professionals both through face-to-face and online modules.
5. Training may be of benefit to other professionals, including general practitioners, reception staff in medical practises, practice nurses and practice managers.
6. Consider increasing the frequency of the training workshops with learning materials and the volume of content needing to be streamlined across the various workshops.
7. Consider developing a professional educational training package that can be offered commercially.
8. Offer induction training to pharmacy assistants and dispensary technicians that provides orientation into their roles and responsibilities in the pharmacy setting.

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