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Short report

First insights into community pharmacy based buprenorphine-naloxone dispensing in Finland

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ABSTRACT

Background: Finnish community pharmacies have been permitted to dispense buprenorphine-naloxone since February 2008. This study explored the dispensing practices, service experiences, problems encountered and opportunities for future development.
Methods: In August 2011, a questionnaire was mailed to all Finnish community pharmacies dispensing buprenorphine-naloxone ($n = 69$).
Results: Sixty-four pharmacies responded (93%), of which 54 had dispensed buprenorphine-naloxone to 155 clients since 2008. Forty-eight pharmacies had 108 current clients (10% of all buprenorphine-naloxone clients in Finland). Overall satisfaction with buprenorphine-naloxone dispensing was high, with all respondents indicating dispensing had gone 'well' or 'very well'. Fourteen pharmacies (26%) had experienced one or more problems, predominately in relation timing or non-collection of doses. Problems were more common in pharmacies with more than one buprenorphine-naloxone client (odds ratio 1.39, 95% confidence interval 1.05–1.86). Most pharmacies ($n = 43$, 80%) identified opportunities for improvement, including the need for more education and financial remuneration. Forty-six pharmacies (85%) were willing to dispense buprenorphine-naloxone to more clients; however, 43 pharmacies (80%) perceived that supervision of buprenorphine-naloxone dosing is not a suitable task for pharmacists in Finland.
Conclusion: Provision of buprenorphine-naloxone in Finnish community pharmacies has remained relatively small-scale. As experiences have been generally positive and problems rare, it may be possible to expand these services.

Introduction

Community pharmacy involvement in opioid substitution treatment (OST) is well documented (Berbatis, Sunderland, & Bulsara, 2005). Danish pharmacies began dispensing methadone in the late 1960s (European Monitoring Centre for Drugs and Drug Addiction, 2000). Nowadays pharmacies provide OST in Canada (Buxton, Kuo, Ramji, Yu, & Krajden, 2010), the U.S. (Gunderson & Fiellin, 2008), New Zealand (Walters, Raymont, Galea, & Wheeler, 2012), Australia (Lawrinson, Roche, Terao, & Le, 2008) and in Europe (European Monitoring Centre for Drugs and Drug Addiction, 2000). Services provided by pharmacies include dispensing medications (mainly methadone and buprenorphine), supervising dosing, and monitoring treatment. However, international differences in pharmaceutical policy and regulation have led to variation in community pharmacy involvement (Berbatis et al., 2005).

Experience from the United Kingdom (UK) and Australia suggests that the number of OST clients per pharmacy is usually low (<10) (Lawrinson et al., 2008; Nielsen et al., 2007; Sheridan, Manning, Ridge, Mayet, & Strang, 2007). In Victoria, Australia some pharmacies have higher client numbers (mean 24–26 clients per pharmacy) (Nielsen et al., 2007; Winstock, Lea, & Sheridan, 2010), and numbers are increasing elsewhere (Matheson, Bond, & Pitcairn, 2002; Matheson, Bond, & Tinelli, 2007; Sheridan et al., 2007). UK pharmacists' attitudes towards OST have improved as OST services have expanded (Matheson et al., 2007; Sheridan et al., 2007). Other pharmacy customers have been supportive of drug misuse services provided that pharmacies have a private

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service delivery area (Lawrie, Matheson, Bond, & Roberts, 2004). OST clients have been generally satisfied with pharmacy services, although a desire for greater privacy, lower costs and similar treatment to other pharmacy customers has been reported (Ezard et al., 1999; Lea, Sheridan, & Winstock, 2008). Community pharmacy dispensing offers clients convenient access, improved possibilities for employment and less stigma than dispensing by hospitals or addiction treatment units (Anstice, Strike, & Brands, 2009; Neale, 1998; Treloar, Fraser, & Valentine, 2007).

Finland has approximately 800 privately owned community pharmacies (Bell, Väänänen, Ovaskainen, Närhi, & Airaksinen, 2007). Buprenorphine-naloxone (Suboxone®) was first marketed in Finland in 2006, and has been dispensed by community pharmacies since February 2008 (Ministry of Social Affairs & Health, 2008). Single ingredient buprenorphine and methadone are only dispensed by addiction treatment units. Community pharmacies only provide OST with buprenorphine-naloxone whereas addiction treatment units provide both detoxification and OST. Pharmacy clients are required to sign a contract compelling them to be prescribed and dispensed all OST medicines from the same physician and pharmacy. If problems occur clients may be reassigned to an addiction treatment unit. Clients are not supervised by pharmacists while consuming buprenorphine-naloxone.

Since August 2009 clients have been entitled to receive limited reimbursement from the Social Insurance Institution of Finland (SII) for the cost of buprenorphine-naloxone, although not all clients apply to receive this reimbursement. Pharmacists can decide whether or not they charge clients a fee for dispensing buprenorphine-naloxone. Community pharmacies do not receive Government funding to provide OST services. It has been suggested that transferring more buprenorphine-naloxone clients to community pharmacies could relieve the work load at addiction treatment units and increase access to OST. However, community pharmacy dispensing of buprenorphine-naloxone has not been studied in Finland. The objective of this study was to explore the dispensing practices, service experiences, problems encountered and opportunities for future development.

Methods

Study sample and data collection

A questionnaire was mailed to all Finnish community pharmacies dispensing buprenorphine-naloxone. A list of all pharmacies that have supplied buprenorphine-naloxone since August 2009 ($n = 71$) was provided by the company with marketing authorization for buprenorphine-naloxone in Finland. Of these 71 pharmacies, 69 were community pharmacies and formed the study sample.

Data were collected using a questionnaire developed on the basis of previous studies (Lawrinson et al., 2008; Matheson, Bond, & Mollison, 1999; Matheson et al., 2007; Nielsen et al., 2007; Raisch et al., 2005; Sheridan, Strang, Taylor, & Barber, 1997). The questionnaire was pilot tested for face-validity in four local pharmacies. Minor amendments were made based on the feedback received. Pilot pharmacies received the final questionnaire at the same time as the other pharmacies and their initial responses during the pilot phase were not recorded. Prior to the mailing of the questionnaires, all pharmacies were contacted by telephone to inform them about the study objectives. Questionnaires were mailed in August 2011 together with a cover letter and a prepaid return envelope. The cover letter instructed the staff member most familiar with dispensing of buprenorphine-naloxone to complete the questionnaire. The staff member was invited to discuss his/her experiences with other staff members prior to completing the questionnaire. Responses were anonymous and strict confidentiality was assured. Return envelopes were coded to identify non-responders but this information was not connected to the answers. Non-responders were contacted again by telephone and reminder questionnaire was sent after one month.

The research was conducted in accordance with recommendations made by the Finnish National Advisory Board on Research Ethics (National Advisory Board on Research Ethics in Finland, 2009). According to Finnish guidelines, local ethics committee approval is not required for postal surveys. All potential participants were provided with written information about the study. Return of the completed questionnaire was considered as consent to participate.

Measures

The questionnaire comprised closed and open-ended questions. The pharmacy setting was characterized as urban, suburban, outside a city but within a local shopping mall, or rural. Pharmacies were categorized as small or large, according to the annual number of prescriptions dispensed (≤80,000 or >80,000).

Pharmacies were asked to report the number of current and all buprenorphine-naloxone clients, whether they charge a dispensing fee from buprenorphine-naloxone clients, whether they had received training on OST, and whether there was a nominated staff member responsible for OST. Pharmacies were asked whether the time needed to serve (handling of prescription, dispensing buprenorphine-naloxone, labelling and counselling) a buprenorphine-naloxone client was the same, more or less than other clients. Pharmacists were also asked to state their overall level of satisfaction with buprenorphine-naloxone dispensing in their pharmacy on a 4-point scale (very well, well, poorly, very poorly) and overall level of satisfaction with co-operation (communication, availability, support) with treatment staff on a 4-point scale (well, fairly well, fairly poorly, poorly). The analyses were performed using the total number of all clients in each pharmacy. The number of current buprenorphine-naloxone clients was compared to the total number of all buprenorphine-naloxone clients in Finland, which was estimated to be 1080 clients in 2010 (Tanhua, Virtanen, Knuuti, Leppo, & Kotovirta, 2011). Pharmacies were also asked to report whether they had experienced any problems related to dispensing buprenorphine-naloxone, whether they suspected diversion or abuse during the previous 6 months, whether any buprenorphine-naloxone clients had discontinued having buprenorphine-naloxone dispensed at the pharmacy including the possible reasons for that, whether providing supervised dosing of OST would be a suitable service for Finnish community pharmacies and about opportunities for future development. The questionnaire also included room for open responses to each of these questions so that respondents could justify their answers. Responses to these open questions were analysed quantitatively. Pharmacies were asked to evaluate how important their role was in different fields of treatment (paperwork, treatment follow-up, dispensing, health education, medication counselling) on a scale of 1 (not important at all) to 4 (very important).

Data analyses

The data were described using percentages, means, standard deviations and medians. Characteristics of pharmacies that responded prior to and after the reminder were compared to assess possible response bias. Binomial logistic regression models were used to analyse factors associated with problems related to buprenorphine-naloxone services. The outcome measure in each model was dichotomous (experienced problems yes or no). Explanatory variables were chosen on the basis of previous literature about OST services (Lawrinson et al., 2008; Nielsen et al.,