



Pacini Editore & AU CNS

Regular article

Heroin Addict Relat Clin Probl 2017; 19(1): 19-26

HEROIN ADDICTION &
RELATED CLINICAL
PROBLEMS

www.europad.org
www.wftod.org

Characteristics of patients accessing NHS Lanarkshire Addiction Services for the treatment of Opioid Analgesic Dependence

Duncan Hill

*Specialist Pharmacist in Substance Misuse, NHS Lanarkshire, Scotland, UK
University of Strathclyde, Strathclyde Institute of Pharmacy and Biomedical Sciences, Scotland, UK*

Summary

Background: Reviewing patient characteristics of new patients attending NHS Addiction Services in Lanarkshire, an increase in new patients accessing treatment for opioid analgesics dependence (OAD) was identified. This article conducted to assist in the identification of the characteristics of OAD patients that are presenting to addiction services in NHS Lanarkshire by using data collected, on the Europad-RADARs surveillance form, at the first medical appointment on substances used in the 90 days prior to admission. **Methods:** A total of 217 patients had accessed the service in the time frame. Of these, 29 patients (13.3%) declared that their primary drug of misuse was a prescribed opioid analgesic. **Results:** The reported results demonstrated that 13 (45%) were female. Various routes of obtaining the medication were reported, including access to illicit markets and supplies. 16 (55%) patients reported taking other medications in addition for a euphoric effect. In relation to chronic pain, as defined in the questionnaire, 10 (35%) of the patients reported to having chronic pain at some point in their life and 19 (65%) reported to have never attended a GP for chronic pain. **Conclusions:** The data collected demonstrates that there is a demand for addiction treatment services to be provided for patients who have been misusing prescribed opioid analgesic medications and the demand for these services appears to be increasing. As a result the services employed to address the issue and provide treatment for these patients may need to be adapted from the traditional illicit opioid user model.

Key Words: Patient characteristics; Opioid Analgesic Dependence; New patients

1. Introduction

From reviewing patient characteristics of new patients attending NHS Addiction Services in Lanarkshire it has been previously noted in the article by Hill [4] there has been an increase in new patients accessing treatment for dependence on opioid analgesics. This was a significant difference in first time attendees in comparison to returning patients. The report from this study also reflected that the age of patients was increasing.

The full extent of the problem remain unknown within the UK and Europe, with much of the data being collected and reported coming from the US, although trends in prescribed opioids are being monitored and their growth noted in the UK and Europe.

The population misusing these medications is not limited by any age or gender specificity, it was previously thought to be due to middle aged women from better socio economic backgrounds taking too many medicines, but this has been demonstrated not to be the case.

The sole source of supply is not limited to the misuse of prescribed opioid analgesics but is also extended to the misuse of Over the Counter (OTC) medications which can be purchased at community pharmacies. This source of medication that can be misused can lead to a further untapped issue of concern as the availability of these medications is common, and they are easily accessible to all [1]. Wright et al. [8] recently reported that the supply of OTC opioid analgesics that are being possibly misused

from community pharmacies in Scotland is now recognised by over 80% of the pharmacies. The possible misuse of opioid analgesics now being identified is greater than that of the sleep aids sold. This has been further added to by a series of case studies [3, 5, 7] which have highlighted the issues of patients becoming dependent on OTC opioid analgesic preparations.

Further report on a study undertaken in community pharmacies in Scotland is also being finalised but shows differences to populations misusing OTC medications from a self report form issued to patients buying these medications from community pharmacies in Scotland. This has encouraged the Royal Pharmaceutical Society in Scotland to develop training for pharmacists and pharmacy staff on identification and responses to potential misuse of OTC problems. These sessions have been supported by the awareness fact sheets issued by the RCGP [6].

The access to opioids may exist from numerous sources, from OTC purchases, supply from friends and family, prescriptions from GPs and people selling drug illicitly. These all have inherent risks both to the individual consuming the medication, e.g. overdose risks, additional ingestion of other substances on combined products and their toxic effects e.g. paracetamol or ibuprofen, and sub-therapeutic dosing of friends or family who may be diverting some of their medication to others (either by selling or giving away their prescribed medication). The risks are seldom presented to both the suppliers but more importantly the users of the medication, and they will probably be unaware of the risks of exceeding the recommended doses of medicines and duration of recommended treatment before seeking medical advice. The source of the medicines used may also change dependent on the time taken for individuals to realise there is a reason for concern and need for treatment. A case study by Conroy and Hill [2] demonstrates the progression from prescribed medication, to illicit use and then treatment, before relapse due to prescription and subsequent return to treatment, this is echoed by the case example from Marr and Hill, where there was prescription use, subsequent OTC purchased and assistance from family to obtain the analgesics before accessing treatment [5].

Patient perception as identifying themselves as an individual dependent on opioid analgesics is often a challenge, as many start to take these medications for valid and legitimate reasons and conditions [1, 2, 3, 5] but this lead to the individuals continuing to take the medication for different reasons. The self identification of being dependent and having an addiction is

difficult as this group of individuals try to distinguish themselves as different to individuals with other addictions e.g. illicit drugs or alcohol [1]. The issues of stigma and treatment are also becoming more common, and service redesign to cater for this patient group is still required, but as the scale of the issue has not been clearly identified, the level of service provision required has also not been clearly projected. Suggestions on service development and reduced stigma have been mentioned in some articles [5] but there is as yet no set standard or practice that has been identified as more suitable than other models.

NHS Lanarkshire collect data on all new patients accessing treatment for addiction issues and are a data collection site for the Europad/RADARs surveillance initiative. The Europad – Radars initiative is collecting data from patients on the substances they have used to gain a euphoric experience in the previous 90 days prior to accessing treatment. The data is being collected from 10 sites throughout Europe, and is being co-ordinated and collected by Europad in Italy, who are working with the RADARs group from Rocky Mountain Drug Poison Centre in Denver, Colorado, US.

This article has been developed to follow on the initial studies conducted to assist in the identification of the characteristics of OAD patients that are presenting to addiction services in NHS Lanarkshire. The routes of access vary between individuals, ranging from self referral to directed access to the services via GPs, however third parties such as Social work, family or pharmacies can also refer individuals to services.

No ethical approval is required for this study as the patient information is anonymous and there will be no impact on treatment provided as a result of the information provided by the patients.

This studies aim is to identify from the RADARs data, the characteristics of patients who have presented to the addictions services in NHS Lanarkshire with a reported dependency on prescribed opioid analgesics.

2. Methods

The patients complete the Europad RADARs surveillance questionnaire at the initial medical with the Addiction Service General Practitioner before commencing on a prescription. The form collates a number of demographics and details relating to the patient, their drug of choice, overdose history, source of medications, substances used to get "high" in the

previous 90 days and access/treatment for chronic pain.

3. Results

At the time of collecting data, 217 patients had accessed the service completing the Europad RA-DARs data collection form.

From this sample 29 patients (13.3%) declared that their primary drug of misuse was a prescribed opioid analgesic (irrespective of source of supply). An anonymised individual breakdown of the patients responding with a reported primary drug that is an opioid analgesic can be seen in Table 1.

From the cohort of 29 patients, the primary drugs were noted as 19 (66%) codeine, 6 (21%) tramadol, 3 (10%) DHC and 1(3%) morphine.

Previous treatment episodes: 86% (25) had not previously been in treatment, 2 (7%) had accessed treatment once previously and 2 (7%) have accessed

multiple times. It is also worth noting 2 patients also reported to being currently in methadone assisted treatment.

Of the 29 reporting to use prescribed opioid analgesics, the patient demographics demonstrated that 13 (45%) were female. The average age of the cohort was 36 years.

When reviewing the source of the opioid analgesic, there are various routes of obtaining the medication that are displayed in Table 2.

Two reported overdoses on prescribed medication in the previous 90 days, and two other individuals admitted an overdose on prescribed medication ,more than 90 days ago.

16 (55%) patients reported taking other medications in order to get “high”. These other medications included other prescription opioids such as tramadol, fentanyl, and codeine, opioid agonist medication (e.g. Subutex and methadone), OTC medications (e.g. Night nurse (paracetamol, dextromethorphan

Table 1: Patient details – anonymised

Number	Gender	Age group	Primary drug	Previous treatment	Source (s)	Other drugs taken to get high	Chronic pain (ever)
1	M	30's	Tramadol	N	Dealer	Codeine, Heroin, Benzodiazepines	N
2	F	30's	Codeine	N	Pharmacy (bought)		Y
3	F	20's	Tramadol	Y - 1	Dealer	Buprenorphine, THC, Gabapentin, Benzodiazepine	N
4	M	30's	Tramadol	N	GP Rx		Y
5	M	50's	Tramadol	N	GP Rx		Y
6	M	40's	Codeine	N	GP Rx	Tramadol	Y
7	F	20's	Codeine	N	Dealer		N
8	M	30's	Codeine	N	Pharmacy (bought)		N
9	F	30's	Tramadol	N	Internet, prescribed, stole	Codeine	N
10	F	40's	Codeine	Y - 1	Pharmacy (bought)	THC	Y
11	F	40's	Codeine	Y - MULTIPLE	Dealer	Benzodiazepine	Y
12	M	40's	Codeine	N	Pharmacy (bought)	THC	N
13	F	30's	Codeine	N	Pharmacy (bought)	NIGHT NURSE	N
14	F	40's	Codeine	N	Friend/relative		N
15	M	30's	Codeine	N	Pharmacy (bought)		N
16	M	40's	Codeine	N	GP Rx	Benzodiazepine	Y
17	M	40's	Codeine	N	GP Rx		Y
18	F	30's	Dihydrocodeine	N	GP Rx		N
19	F	30's	Dihydrocodeine	N	GP Rx		Y
20	M	30's	Codeine	N	Dr RX, Friends relative, A&E	Tramadol (oral and injection), Gabapentin	N
21	M	20's	Codeine	N	GP Rx		N

Table 1: Patient details – anonymised

Number	Gender	Age group	Primary drug	Previous treatment	Source (s)	Other drugs taken to get high	Chronic pain (ever)
22	F	30's	Dihydrocodeine	N	Friend/relative	Codeine	N
23	M	20's	Codeine	N	Friend/relative	Tramadol, THC, Amitriptyline, Gabapentin	N
24	M	20's	Tramadol	N	Friend/relative	Codeine, Benzodiazepine	N
25	M	30's	Codeine	N	GP Prescription, Friend relative		N
26	F	30's	Codeine	N	GP Prescription, Friend relative		Y
27	M	20's	Codeine	N	GP Prescription, Friends, Pharmacy	Fentanyl	N
28	M	30's	Morphine	Y - 5	Dealer	Tramadol, Methadone, Subutex, Codeine, THC, Pregabalin	N
29	F	40's	Codeine	N	Friend/relative	Tramadol, Cocaine, Benzodiazepine	N

and promethazine (a cold and flu remedy)), prescription gabapentinoids (e.g. pregabalin, gabapentin) and other illicit drugs, including cannabis and cocaine. 6 patients (20%) declared benzodiazepine use in the previous 90 days to get “high” (i.e. for euphoric effects, not for therapeutic dosing or treatment) before accessing treatment. The range of other substances used extended from 1 to 6 different drugs taken by a single individual.

5 of the responders admitted accessing dealers, but a further 5 individuals reported to purchasing/accessing cannabis or benzodiazepines in addition to the opioids, suggesting they have possible access to illicit markets (sources) increasing the possibility of 10 patients (35%) have access to illicit markets and supplies

Of the seldom used sources A&E, internet and theft only account for one individual each and these options are not the sole source for the individuals accessing in this manner.

In response to the questions relating to the patients suffering from chronic pain, 10 (35%) of the patients responded to having chronic pain as defined in the data collection form (which is “Pain that has lasted for at least 3 months, which occurs constantly or flares up frequently”).

When asked to put a time frame on the last appointment with their GP in relation to the pain, 19 (65%) reported to have never attended a GP for chronic pain, 3 (10%) had presented within the last 7 days, 4 (14%) in the last 30 days and 3 (10%) within the last year.

2 of the 6 individuals reporting to only misusing OTC medications admitted to suffering from chronic pain at some point in their life as defined in the questionnaire.

Table 2: Source of supply of medication

Source declared	Number of patients *	Only source	Multiple sources
Dealers	5	5 (17%)	0
Over the counter (Pharmacy sale)	7	6 (20%)	1 (3%)
Friends and relatives	9	5 (17%)	4 (14%)
GP prescribed	13	8 (27%)	5 (17%)
Internet	1		1 (3%)
A&E	1		1 (3%)
Stolen	1		1 (3%)

*Number of patients will add up to more than 29 as some are accessing from multiple sources

4. Discussion

The patients accessing the addictions service with dependency on opioid analgesics are a new group to access treatment in NHS Lanarkshire, 86% of the patients are accessing services for the first time which highlights that these are new patients and have not reported to be in treatment previously.

The expected demographics of a more mature female from a mid to very affluent background who took too many pills (of medication they had been prescribed) through boredom can be challenged.

The gender difference is a different proportion to that seen with traditional illicit opioid misusers. The traditional group tend to have a ratio of 3 males: 1 female (this ratio is also seen with the RADARs sample as a whole), however with the group misusing opioid analgesics the male female ratio is reported to be much closer at nearing 1:1.

The ages are fairly consistent between the whole sample and the opioid analgesic groups, but this is to be expected as the age of illicit drug misusers accessing the services has increased in general. This is also the age range identified in the previous study [4]. The reported overdose history from these patients is of concern, 4 of the 29 (13.8%) reported to have had an overdose previously, 2 (6.9%) within the last 90 days and 2 (6.9%) in a longer time period. This highlights an area of concern and an issue that needs to be addressed by awareness raising both for prescribers/providers (e.g. GPs and pharmacies) of opioid analgesics (self awareness of the risks but also patient education requirements) and for the patients themselves.

13 (45%) of the surveys reported that the individuals were not using any other substance than the one declared as their primary substance, however the other 55% (16 patients) admitted using other substances. There is a wide spread of other substances, in addition to the primary drug, reported to be consumed ranging from a single other OTC medication (Night Nurse) or prescription medication (including tramadol, fentanyl) or illicit drug (cannabis) through to 6 different substances (which included cannabis, pregabalin and 4 opioid substances). The consumption of other substances in addition to the primary misuse of an opioid carries an increased risk of overdose and again highlights the needs for patients to be aware of the dangers and recognition to signs of overdose and actions to take in the event of witnessing an overdose. The availability of naloxone to reverse opioid overdoses is widely available through addiction services in Scotland and can also be prescribed

by GPs, and this should be considered for patients who are at risk of overdose due to consumption of opioid medications. The propensity of the patients misusing medications for the consumption of multiple medications/substances demonstrates a similar affinity to poly pharmacy exhibited by “traditional” illicit drug users.

The range of sources of the opioid analgesics is wide, 24 of the 29 patients (83%) are reporting to only use a single source for their opioid analgesic, and however 5 report multiple sources. There is a high number (17%) that access the medication only through dealers, but a further 17% also report to using either cannabis or benzodiazepines in addition to opioids which demonstrates possible links to dealers of illicit medication.

Literature has reported that many patients misusing opioid analgesics may have been introduced to the medication through genuine reasons [1, 2, 3, 5] and they have been initially prescribed by the GPs to treat the presenting condition, 45% of the group reported to have being prescribed opioid medications from their GP and for nearly two thirds of this the GP remains the sole source of medication. It should be noted that not all the patients report to being prescribed for chronic pain, although 10 (35%) do have a reported diagnosis from their GP. With 27% of the sample reporting to only accessing the medication by prescriptions for their GP, there is a need and opportunity to provide interventions and review. Raising the issue of opioid analgesic dependence and supporting awareness using materials e.g. RCGP factsheets at both GP surgeries and community pharmacies will possibly provide an intervention and reduction in possible misuse. Other sources of reference [1, 3] also highlight the initial use of the medication may be for reasons other than pain but to induce a euphoric sensation [6].

20% of the sample report to only purchasing the opioids used from pharmacies, this is a practice they may have found as easy but it can be also very risky. There is easy and ready access to the medication through community pharmacies, and there is nothing to prevent patients attending and purchasing OTC opioid medication from multiple pharmacies within a single day. An additional risk to the potential for respiratory depression associated with opioid for the patients purchasing opioids in this manner in addition are the toxic effects from the other drugs included in the combined preparations, e.g. paracetamol – hepatotoxicity and ibuprofen – nephrotoxicity and gastric irritation. In the quest for the opioid effects patients

may choose to ignore these and the advice provided in the community pharmacies increasing the risk or long term effects and ill health. Very high levels of combined analgesics are sometimes taken [7]. With these associated dangers and the possible lack of awareness of the general population to the risks associated with passing medication, either for free or for financial reward, there is a need for an awareness raising campaign for the general public to the potential problems this issue may cause.

The less used sources are theft, A&E attendance and internet and only seem to be used by patients using multiple sources of supply. This can be viewed as positive as there may be checks completed using Electronic Care Summaries by A&E and Out of Hours (emergency) services to prevent access to the medication from more than one source in the NHS, despite good availability to internet in Scotland, this market is not reported to be commonly used and that patients are not frequently stealing from others individuals prescribed the medication.

Two patients reported to having a current primary drug of misuse that was an OTC medication and source, despite being in treatment with methadone for previous opioid misuse, this highlights the need for all treatment services to fully assess patients and provide advice on medication use, including OTCs. This further emphasises the need for all individuals involved in patient care to fully review patients, but also share information e.g. a patient possibly misusing opioid analgesics purchased OTC, whilst in treatment with methadone.

As the paper is demonstrating, there is a demand for addiction treatment services for patients who have been misusing prescribed opioid analgesic medications, and the demand appears to be increasing, and will be expected to continue to do so, as a result the services employed to address the issue and provide treatment for these patients need to be adapted. Marr and Hill [5] made numerous suggestions for consideration with regards to treatment provision and some of the aspects that should be considered when developing services, these included issues such as clinic location, assessment, dispensing/supervision arrangements and stigma reduction associated with treatment.

Limitations

Data collected was on a validated form, agreed by a multinational group. This may not collect some of the additional data such as employment status

which may be of interest.

The data collection area is a single health board in Scotland and only from the addictions service entrances to treatment, which may exclude some patients accessing services for the treatment of opioid analgesic dependency, which may be delivered by the GP.

5. Conclusions

The data collected demonstrates that there is a demand for addiction treatment services to be provided for patients who have been misusing prescribed opioid analgesic medications and the demand for these services appears to be increasing. As a result the services employed to address the issue and provide treatment for these patients may need to be adapted from the traditional illicit opioid user model.

References

1. Cooper R. J. (2013) 'I can't be an addict. I am.' Over-the-counter medicine abuse: a qualitative study. *BMJ Open* 2013; 3: DOI: 10.1136/bmjopen-2013-002913
2. Conroy S., Hill D. (2014). Failure to identify or effectively manage prescription opioid dependence acted as a gateway to heroin use—methadone maintenance treatment followed by high-dose transfer to buprenorphine/naloxone and recovery in a surgical patient. *BMJ Case Rep*; doi:10.1136/bcr-2014-207458
3. Hard B. (2014) Management of opioid painkiller dependence in primary care: ongoing recovery with buprenorphine/naloxone. *BMJ Case Rep*. doi:10.1136/bcr-2014-207308
4. Hill D (2016). Analysis of patient data on admission to treatment in NHS Lanarkshire Addiction Services. *Heroin Addict Relat Clin Probl* 2016; 18 (1): 37 - 44
5. Marr E, Hill D (2015). Optimising service provision for prescribed opioid analgesic dependence. *Heroin Addict Relat Clin Probl*. 2015, 17 (5) : 13 - 18
6. Royal College of General Practitioners (RCGP) (2014). Prescription and over-the-counter medicines misuse and dependence. Factsheets 1–4. <http://www.rcgp.org.uk/bookshop/eresources.aspx?CurrentPage=2&ipp=10>
7. Van Hout M. C., Delargy I., Ryan G., Flanagan S., and Gallagher H. (2015) Dependence on Over the Counter (OTC) Codeine Containing Analgesics: Treatment and Recovery with Buprenorphine Naloxone. *Int J Ment Health Addiction*: doi 10.1007/s11469-015-9618-2
8. Wright J, Bond C, Robertson H and Matheson C (2015) Changes in over-the-counter drug misuse over 20 years: Perceptions from Scottish pharmacists. *J Public Health* 1–7 | doi:10.1093/pubmed/fdv169

Acknowledgements

Thanks and gratitude are extended to: 1) The GPs of NHS Lanarkshire addictions Services, Drs Conroy, Morrison, Davidson, Stewart and Mukherji who have completed and returned the questionnaires, the patients of NHS Lanarkshire for providing the information. 2) Colleagues and co-ordinators for the data collection for the Europad-RADARS surveillance initiative and colleagues at RADARS for assisting with analysis of the data.

Role of the funding source

There has been no external funding requested or used in the preparation of this paper.

Conflict of interest

The author reports no conflict of interests in relation

to this paper.

Ethics

Authors confirm that the submitted study was conducted according to the WMA Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects. No ethical approval is required for this study as the patient information is anonymous and there will be no impact on treatment provided as a result of the information provided by the patients.

Note

It is the policy of this Journal to provide a free revision of English for Authors who are not native English speakers.

Received April 6, 2016 - Accepted June 28, 2016