$© 2020.\ Licensed\ under\ the\ Creative\ Commons\ Attribution-NonCommercial-NoDerivatives\ 4.0$ International http://creativecommons.org/about/downloads



DOI of final article - https://doi.org/10.1016/j.cptl.2020.10.006

The Influence of Pharmacist Training on The Safeguarding of Children; a City based study

Abstract

Introduction: Community pharmacists are in a unique position to encounter children visiting the pharmacy, which means they are potentially able to catch signs or instances of child abuse and neglect.

The aim of this study is to establish the influence of training programs that pharmacists undergo on their

understanding and knowledge regarding safeguarding issues and referral processes, to better manage

the situation if it were to arise.

Methods: A 15 question survey was used to collect data from community pharmacists around the area of Cardiff, United Kingdom, regarding the safeguarding of children. The questionnaire explored community pharmacist's judgement on various aspects of the maltreatment of children, including the

influence their training has on their outlook and behavior towards child safeguarding.

Results: Overall 72.8% (n=91/125) deemed their training adequate enough to aid them in safeguarding children. An average score of 8/10 for pharmacist knowledge and 7.7/10 for confidence was recorded for knowing when to refer a suspision of a safeguarding issues. The correlation of knowledge and confidence was statistically significant (p<0.01). However, knowledge and confidence of where to refer a safeguarding issue was only 7.0/10 and 6.9/10 respectively. Only 20/125 pharmacists had referred a

safeguarding concern.

Conclusion: It is apparent that the training for pharmacists regarding the safeguarding of children needs

to be improved. The application of advanced pharmacist training and the opportunity to include the

teaching of safeguarding issues into universities offers positive benefits regarding pharmacists'

knowledge and confidence towards the handling, management and reporting of child maltreatment.

Keywords: Pharmacist; Safeguarding Children; Training, Prevention; Child Maltreatment; Confidence;

knowledge.

Conflict of interest:

The Authors declare that they have no conflicts of interest to disclose.

Disclosure(s):

"This research received no specific grant from any funding agency in the public, commercial, or not-

for-profit sectors"

Introduction

The safeguarding of children (SGC) is defined as the action taken to support the wellbeing of children to protect them from abuse or neglect.¹ All individuals, including healthcare professionals (HCPs) such as pharmacists, dentists, doctors and nurses, have a responsibility to report signs or suspicions of maltreatment. This is especially important when working with children and families and being vigilant when reporting suspected cases of child maltreatment.² However, the reporting of maltreatment is still very rare, despite the common knowledge that violence against children has reached epidemic levels.³ Nevertheless, in recent years, statistics have shown an increase in willingness to pay attention and take notice of children as victims of abuse and initiate the prosecution of the perpetrator involved.⁴

The role of community pharmacists, especially in their natural working environment, places them in a unique position to detect signs of neglect and abuse. A pharmacist's role includes supervising the supply of medication and ensuring it is within the law, responding to presenting symptoms as well as answering questions of patients.⁵ Pharmacists also have the advantage of encountering children with their family who visit the pharmacy. If there is an evident shift in behavior from child or guardian, this can alert the pharmacist to be a sign of a safeguarding issue. Information has been published in the United Kingdom (UK)⁶ which places emphasis on the specific responsibilities that HCPs should possess in these situations, such as talking to family members privately and referring them to their family doctor if they are having trouble handling their child, or even referring them to their local safeguarding children board (LSCB) when there are clear and evident signs of abuse. Yet, it has been reported that some HCPs feel nervous to raise concerns regarding the abuse of children, for reasons that include wrongfully blaming a guardian or carer of abuse, and fear for personal safety.8 The safeguarding of children is of paramount significance and should always be a HCPs main priority, due to children having the right to be protected from violence and to be kept safe. Irrespective of their role or doubts, HCPs have a duty to safeguard children from malevolence. The intercollege safeguarding training competencies equips them for this task.9 All pharmacists must be able to recognize the different signs and actions of abuse, for this will aid them in making a suitable decision in how to handle a situation of child maltreatment if it arises.

Child maltreatment (abuse) is the sexual, emotional and physical mistreatment or neglect of a child. The four main categories of child abuse are as follows; neglect, physical abuse, emotional abuse

and sexual abuse. ¹⁰ The failure to equip the safety, supervision, shelter and nutritional requirements of a child is characterized as neglect. This failure can be; educational, e.g. failing to enroll a child in school, physical, e.g. lack of health care and inadequate supervision or emotional, e.g. neglecting the child's desire for affection and psychological care. ¹¹ Physical abuse covers any injury that is inflicted on a child by their guardian or carer in an intended manner, which entails hitting a child with hands, various objects, punching, kicking, choking and many more. ¹² Emotional abusers tend to ignore, terrorize, isolate and reject their victims. ¹³ Children who experience sexual abuse are considered to have suffered sexual acts at the hands of their abuser, such as intended or attempted intercourse, exposure to adult sexual activity or even used for the means of child prostitution. Their sexual abuser could be an adult as well as an older child. ¹⁴

Special care is applied during the supply of medicinal products from a community pharmacist, to ensure safety and appropriateness. This is especially the case for over the counter (OTC) drugs for children. A refusal for the requested OTC medication must be implemented by the pharmacy team where rational grounds of suspicion for drug abuse is present. He harmacists follow professional standards that state you must use professional knowledge and confidence to refuse the supply of medication you believe is being misused. An example of a product that is regularly abused is sedating antihistamines e.g. Promethazine or Chlorphenamine. He misuse of analgesics, such as paracetamol and codeine (Co-Codamol), drugs for cold remedies and psychotropic drugs were among the drugs reported in 1439 cases of children maltreatment between 2000 and 2008. These drugs can only be purchased from registered pharmacies, so a pharmacist could intervene and refuse a sale if needed. Pharmacists are urged to report every concern to the relevant health professional, as there may be ongoing concerns from neighboring pharmacists simultaneously. This could then help promote a better understanding of the situation related to specific families. A UK charity known as the National Society for the Prevention of Cruelty to Children (NSPCC), has predicted that 500,000 children or more are abused across the UK every year, which is a substantial concern.

Every pharmacist in the UK needs to undergo training for the safeguarding of children to learn how to protect a child's health and wellbeing. Mandatory training of pharmacists in the UK was introduced as part of the National Health Service regulations in 2005, to ensure pharmacists and their staff were aware of local safeguarding procedures and the local reporting arrangements. One of the biggest providers in England for the safeguarding of children training is The Centre for Pharmacy Postgraduate

Education (CPPE).¹⁹ In Wales, CPPE are known as Health Education and Improvement Wales (HEIW). Pharmacists are also able to complete their training for the safeguarding of children through their employer, or other providers.

In recent years, the safeguarding of children has become the forefront of concern in a child's wellbeing throughout their childhood along with their physical and emotional health. Regarding pharmacists and their training for the safeguarding of children, there is finite research available to guide them in throughout their careers, with minimal publications available.

The aim of this study is to establish what influence the training programs that pharmacists undergo for the safeguarding of children has on their knowledge of safeguarding issues and their confidence and understanding of the referral process, to better manage safeguarding issues if they were to arise. Methods

A survey was used to collect firsthand data from community pharmacists. The survey was used to assess pharmacist's personal perceptions towards the topic and how it affects their attitude towards this safeguarding issue. Cardiff, Wales, was the city chosen to conduct this study for both purposive and convenience sampling, due to an article stating that the relationship between adverse childhood experiences and stressors were linked to more hospitalizations and doctor visits in Wales compared to England in the past year.²⁰

No previously validated survey could be found, so a questionnaire was created to address the stated aims and follow an inductive process. The questionnaire was piloted to community pharmacists, randomly chosen, across 5 pharmacies within Cardiff for face validity and feedback intentions. No changes were made due to participating pharmacists mentioning there was no reason to change any aspect of the questionnaire as it was clear as to what was being asked. Potential participants were given a survey of 15 questions which was separated into different areas of safeguarding such as; the training they have undertaken for the safeguarding of children, which included tick box, Likert–type items, matching and open-ended and closed-ended questions, their understanding of safeguarding and how their training has aided them in their work. Pharmacists were asked to match the correct action of abuse to the corresponding type of abuse, which fell under the 4 different categories of abuse; physical abuse, emotional abuse, sexual abuse and neglect.²¹ Demographics of gender and years qualified were obtained. A copy of the questionnaire can be found in the appendix.

Implied consent was given through completion of the questionnaire. The survey was targeted at community pharmacists in the area of Cardiff. There is a total of 92 community pharmacies in Cardiff ²² and a minimum of two pharmacists were assumed to work at each pharmacy, from previous workforce data. Using the Raosoft sample size online calculator, http://www.Raosoft.com/samplesize.html/ based on 184 pharmacists, the minimum sample size of pharmacists to gain responses from the questionnaire to was 125.²³ This would achieve a 95% confidence level in the results, estimating the proportion of participants that possess the inclusion criteria relevant to the study, and minimize margins of error in the received results, assuming normal distribution of data. 95% was chosen, as higher confidence intervals would require larger data sets. Data collection took place between January and March 2019. All pharmacies were visited in person by the researcher to hand out the questionnaires to pharmacists present. The researcher waited in the pharmacy for any completed questionnaires. The researcher then asked how many other pharmacists work in the pharmacy and then left the respective amount of questionnaires for pharmacists not present to complete, and returned at an agreed later date to collect them.

All quantitative data collected from the questionnaire was logged into SPSS software for statistical analysis. (IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.)

Descriptive statistics were run on all variables and association between predefined independent and dependent variables. Results were deemed statistically significant when p <0.05. For the analysis of Likert-type item questions, knowledge, confidence and understanding were examined based on different pharmacist attributes, and a mean score was calculated from the results to aid comparison of scores. For qualitative data content, analysis was used to identify how many times an outcome was mentioned.

This work was ethically approved by the University ethics committee.

Results

The number of responses received was 125, thus achieving a 95% confidence interval of the sample size. All pharmacists who participated answered all questions in the questionnaire. Female pharmacists accounted for 65% (n=81) of responses, and 39.2% (n=49) of pharmacists answered that they have been qualified for 5-10 years.

Details of Training

When pharmacists were asked how long it had been since they last underwent training for the safeguarding of children, 53.6% (n=67/125) had completed their training within 6 months of completing the questionnaire and training had been completed online by 77.6% (n=97/125) of pharmacists. Over three quarters of the pharmacists surveyed had completed their training with CPPE or HEIW. Full results regarding details of training are included in table 1.

TIME SINCE THE LAST SGC TRAINING	RESPONSE (n=125)
Less than 6 months	53.6% (n=67)
Less than 1 year	37.6% (n=47)
Less than 2 years	8% (n=10)
More than 2 years	0.8% (n=1)
HOW PHARMACISTS UNDERWENT THEIR TRAINING	RESPONSE (n=125)
Online	77.6% (n=97)
Face-to-face	15.2% (n=19)
Assessment (internal SGC training and examination by provider)	7.2% (n=9)
	DECDONICE (400)
PROVIDER OF TRAINING	RESPONSE (n=125)
HEIW	RESPONSE (n=125) 52% (n=65)
	` ,
HEIW	52% (n=65)
HEIW CPPE	52% (n=65) 24% (n=30)
HEIW CPPE NHS Trust	52% (n=65) 24% (n=30) 12.8% (n=16)
HEIW CPPE NHS Trust National Governors Association	52% (n=65) 24% (n=30) 12.8% (n=16) 4% (n=5)
HEIW CPPE NHS Trust National Governors Association Tesco	52% (n=65) 24% (n=30) 12.8% (n=16) 4% (n=5) 4% (n=5)

Table 1 Training details

Training and its Influence on Pharmacist Knowledge, Confidence and Understanding

Most pharmacists, n=91 (72.8%), felt satisfied with their training. When looking at knowledge and confidence, full results can be seen in table 2. The correlation of knowledge (8/10) and confidence (7.7/10) on knowing when to refer, and also knowing who to refer to (knowledge=7/10; confidence=6.9/10), is statistically significant (p<0.01). The minimum figure chosen on the Likert-type item was 3/10 for both questions.

When considering gender and pharmacist's confidence, no significance was found (p>0.05; female: mean=8.1(SD=1.09); male: mean=7.8(SD=1.10)), in the ability to spot signs of child maltreatment. Likewise, when correlating pharmacist confidence regarding when to refer and gender, female pharmacists scored considerable higher at 84% (n=27) than male pharmacists (15%, n=5) scoring their confidence 9 out of 10, with overall mean scores being 7.5/10 (SD=1.12) for males and 7.8 (SD=1.11) for females. Considering whether the amount of years a pharmacist has been qualified has an impact on their confidence in refusing OTC medication, results showed a strong non-significance (p>0.05). Overall in the Likert-type item question 95 pharmacists scored 9 or 10 out of 10 for confidence

in refusing a sale with increase in confidence increasing with length of qualification, with 11/19 (58%) of those qualified less than 5 years scoring 9/10 or above, compared to 100% (n=6/6) in those qualified for 21-25 years.

	Knowledge	Standard	Confidence	Standard
	Mean (Out	Deviation	Mean (Out	Deviation
	of 10)		of 10)	
Knowing when to refer on the first instance	8.0	1.1	7.7	1.1
of suspicion of maltreatment of a child				
Knowing who to contact or where to visit	7.0	1.6	6.9	1.5
for the referral of child abuse				
Refusing a purchase of over the counter	8.7	1.2	9.0	1.1
medication if you suspect drug abuse				
towards children				
Ability to suspect signs associated with the	Not asked		7.9	1.1
maltreatment of a child				
How effective training was to aid	Not asked		7.9	1.1
recognizing different signs of abuse in				
children				

Table 2 Knowledge and confidence of pharmacists

More than half of participating pharmacists (n=68, 54.4%) stated that their training was sufficient with no need for any improvement. However, for those who stated improvements were needed, when asked to give reasons for this a mixture of reasons was given. The most frequent comment asked for more frequent face-to-face training (n=20,16%) and the second most common comment was that the safeguarding of children should be introduced to students during their pharmacy degree (n=10, 8%). Full results can be seen in table 3.

Theme of comment	Number of
	responses
More frequent face-to-face training needed, in the form of workshops or seminars.	20
SGC should be introduced to students completing their pharmacy degrees	10
Training needs to be updated as it is repetitive	8
More emphasis needed on who to contact and how to complete a referral	6
Inclusion of more real-life scenarios	2
Separate training sessions depending on the amount of years of qualification	1

Table 3 Suggestions to improve the training of safeguarding training

Understanding the Issues Related to the Safeguarding of Children

Only n=31 (25%) of pharmacists were able to correctly match actions to the correct single-specific category of abuse. Pharmacists who may have matched the correct action of abuse to the correct category of abuse, also selected multiple other categories, showing the uncertainty of n=94 (75%) pharmacists on what action of abuse belongs to what category of abuse.

As seen in Table 2, knowledge and confidence regarding OTC drugs that have potential for abuse were 8.7 and 9 respectively. Analysis showed that n=46 (36.8%) pharmacists have refused the purchase of OTC drugs. Of these 46, antihistamines had been refused on 24 occasions (50%). Named antihistamines included Promethazine and Chlorphenamine. The next class of drug that is most frequently refused at purchase is pain medication, with Co-Codamol being noted repeatedly (n=12/46, 9.6%).

Understanding of Referral Processes

Upon asking whether pharmacists have ever initiated a referral due to a suspicion or evident signs of child maltreatment, most pharmacists (84%, n=105) noted they have not. Of the 20 (16%) pharmacists who had referred an incident of child maltreatment 85% (n=17/20) had only referred once in the past year and 10% (n=2/20) had referred twice. Of the referrals, 19 out of 20 were regarding abuse of OTC drugs. Results for the rate of referrals completed depending on gender differences for child maltreatment (14 female, 5 male) indicated non-significance, p>0.05. Within the study, out of the total n=20 (16%) pharmacists that responded 'yes' when asked if they 'have ever initiated a referral due to suspicion or evident signs of maltreatment towards children', 25% (n=5) of that total were male pharmacists compared to that of female pharmacists (75%, n=15).

Discussion

Findings from this study show that pharmacists are undertrained in the area of safeguarding of children. Although personal perception may show high statistical results from the questionnaire regarding pharmacists' knowledge and confidence regarding what signs and OTC drugs to look out for in child maltreatment, there is missing knowledge regarding the appropriate teams they need to reach out to if an alert needs to be raised.

Training and its Influence on Pharmacist Knowledge, Confidence and Understanding

When looking at training and its influence on pharmacist perceptions, if trained correctly, pharmacists can connect their increased confidence in knowing how to deal with the safeguarding of children and apply it and heighten their confidence in acting upon that suspicion of child maltreatment to take the appropriate action. As also seen in this study, an article by Gao et al.²⁴ investigated the relationship between 'knowledge and attitude of HCPs regarding child maltreatment'. It concluded that HCPs presented an inadequate level of knowledge for determining possible child maltreatment cases

especially that of sexual abuse cases. The diminished confidence and the stated confusion toward the referral process were determined as the major source of underreporting.

Most pharmacists felt that their training was adequate to equip them with the right knowledge to safeguard children. There may be a need for a variety of different choices as to how pharmacists can undergo their training for the safeguarding of children. Although online was most prevalent for completion, face-to-face training was asked for. The future for pharmacist training regarding the safeguarding of children has room for improvement. The safeguarding of children is one aspect of healthcare that is imperative to all HCPs but there is an insufficient amount of research, support and guidance available to them. By incorporating workshops with interactive simulations may enhance the confidence and knowledge of what process pharmacists need to follow when handling this issue. Encouraging others such as local authorities, LSCB's, other HCPs and even primary schools to be involved in this improvement in training can bridge that support, understanding and affirmation individuals may need to feel confident undergoing the appropriate actions against child abuse and neglect.

Introducing the issue of child safeguarding and incorporating it into pharmacy practice throughout a student's university degree could increase a pharmacist's ease in handling the issue in the future. Workshops for newly qualified pharmacists could be separated from qualified pharmacists, to erase any intimidation they may feel due to being under taught in the subject to strengthen their confidence on this issue.

Understanding the Issues Related to the Safeguarding of Children

The statistically significant correlation before knowledge and confidence in knowing when and who to refer to when abuse is suspected, highlights the direct effect between pharmacist knowledge and their own personal confidence in who to contact for situations regarding child maltreatment.

Expanding on a study by Kara et al.²⁵ the relationship between gender, suspecting the signs of child maltreatment and knowing when to refer the maltreatment of a child were looked at in this study. When considering gender and if pharmacists are confident enough 'to suspect the signs associated with child maltreatment', it was proven to be non-significant with a negative correlation between the two, so confidence in suspecting signs is not related to gender. However, in this study, results showed that a low number of male pharmacists were confident and knowledgeable enough to suspect signs of child maltreatment compared to that of females, with no significant difference. Therefore, concerning their

differences, where females excel in initiating referrals and suspecting signs and instances of child abuse, males fall behind. It is evident not only from the Kara et al.²⁵ study but from this study as well, that there is a vast difference in confidence and knowledge in gender roles regarding the safeguarding of children. Cockerill et al.²⁶ published an article presenting information that female pharmacists devote a great deal more time on childcare activities in contrast to their male colleagues, as well as committing more time to be in direct contact with patients. Although this supports the analysis of females being more attentive on a day to day basis due to them imposing the importance on the psycho-social aspects of their careers, it is also right to hypothesize that the stark difference in figures between male and female could feed from the fact that currently, females dominate over males in the profession of pharmacy with females accounting for 69.1% of community pharmacists, according to an article published by Janzen et al.²⁷ Regardless of this statistic, research into why male pharmacists are less confident in their role to safeguard children should be done, to give male pharmacists the confidence and knowledge needed to feel at ease initiating referrals regarding child abuse and recognizing instances of child abuse.

Demographics in the questionnaire did not include ethnicity. However, if it was included, the difference between ethnicity and the attitude towards recognizing which abuse belongs to what category of abuse could have been analyzed. The importance of emphasizing this matter is not to discriminate towards pharmacists of different ethnic backgrounds, it is so child negligence and maltreatment does not go unreported in these ethnic groups due to their own personal cultural backgrounds and beliefs. Raman et al.²⁸ aids this theory by explaining that HCPs who work closely with children daily, find it challenging to converse with children's parents from linguistically and culturally diverse groups. Specifically, these HCPs found it difficult to explore and resolve the tension between the meaning of child abuse and neglect concerning the child-rearing and diverse cultural practices. The influx of immigration in the latter half in the 20th century²⁹ has altered the dynamic of cultural and ethnic societies across the western world. The influence and relationship within multicultural societies to understand and identify child abuse and neglect can be testing and complex, so this could be an aspect that is introduced in pharmacist training for the safeguarding of children where applicable.

Understanding of Referral Process

Regarding gender differences in the rate of referrals for child abuse and neglect, this study showed no gender difference. However, females were more inclined to initiate a referral compared to men in a

previous study published by Kara et al.²⁵ that presented evidence that when confronted with suspicions or cases of abuse, female HCPs (majority being married, p < 0.001) had a higher degree of knowledge on how to handle the situation and commence procedures of legal notice and referral. Bearing in mind that an estimated 250,000 to 350,000 children are living with drug users in Wales and England,30 the number of referrals relating to the suspected or inappropriate use of OTC drugs in the past year was not surprising. Where pharmacists lack knowledge and confidence in the safeguarding referral procedures, they excel the types of OTC medication that warrant the refusal of purchase as well as refusing the purchase of certain OTC medications. Knowledge for OTC medications and confidence in refusal of purchase revealed a significant trend. Even though pharmacists have the knowledge and confidence about certain OTC medication that warrants refusal of purchase, and are prepared to refuse, it may be other implications within the referral process that is stopping them following through with legal proceedings, such as the fear of falsely claiming the abuse of a child. In addition, their confidence to 'initiate a referral when knowing the appropriate institutions to refer the abuse of a child', is also directly affected by this decrease in knowledge. Again, the two variables were statistically significant. Overall, it shows that when pharmacists possess low levels of knowledge about appropriate institutions to refer a suspicion or instance of child maltreatment to, the amount of unreported cases of child maltreatment increases. Additionally, pharmacists possessing a low level of confidence fuels this increase in underreporting, as they do not believe themselves fully equipped to deal with the safeguarding of children as well as in who to contact.

Pharmacists in this study mentioned that any reluctance they may have to refer child abuse and neglect is on the basis that their suspicion of abuse may be a false claim and were worried what the repercussions may be. Kuruppu et al.³¹ released a publication which mentioned HCPs reluctance to refer is down to their 'emotions of fear and guilt and the impact this could have on the HCP – patient relationship'. Pharmacists' guilt was based on possibly causing parents to deem themselves as 'bad parents' and their fear was based on parents finding out about the report. Additionally, regarding a pharmacists worry about making a false claim, Kuruppu et al.³² also stated that pharmacists who fear this often claimed they required evidence of more serious harm before initiating a report. However, the law states that for a report to be initiated, a suspicion of child maltreatment alone is enough to warrant this, and a collection of evidence is not required from the HCP. Even if HCPs who have raised a concern

which subsequently turns groundless, they can justify their decision by having acted on the assumption of reasonable belief and having gone through the relevant legal proceedings.

The study results show limited knowledge of types of abuse. Where answers were given, this could be because their answers are relative to the experience and personal knowledge they personally have experienced in their working lives.

Limitations of this study include that it was conducted in the area of Cardiff meaning the results are not from a broad representation of pharmacists' experiences. In addition, only a small sample was received, which did not achieve the wanted sample size. A broader area could be chosen to repeat this study to get this wider range in results. Also, a section relating to the specific areas that participating pharmacists work, could have been added to the questionnaire to understand whether their confidence alters based on location of work. Ethnicity of responders was also not recorded. Future work could compare answers in different areas, along with different countries to identify whether different legislation in various countries affects perceptions and results.

Conclusion

From the results of this study, it is evident that the training for the safeguarding of children for pharmacists needs to be reformed. With finite research studies done on the safeguarding of children, this study is the first of its type found to be geared specifically towards how pharmacist training impacts the safeguarding of children. Due to this, is was difficult to validate findings within the results of this study. The application of advanced training related to child safeguarding has shown to result in positive benefits regarding pharmacist knowledge and confidence for recognizing, planning, acting on, reporting and managing obstacles in this safeguarding issue. There may be barriers that restrict the success of improving pharmacist training such as the lack of funding and a shortage of volunteers to help with interactive workshops. Nonetheless, for pharmacists to succeed in promoting an increase in referral rates for child maltreatment, the different practice techniques, as mentioned above, should be implicated in future training, as well as the furtherment of newly introduced programs and standards to pharmacy students within universities.

It is imperative, not only for the safety of children but for the commitment pharmacists have in the issue of child safeguarding, that more research and training implications are made for this safeguarding issue to reach future success.

References

- National Society for the Prevention of Cruelty to Children. Safeguarding children and child protection. Published 2020. Accessed 04 October 2020. https://learning.nspcc.org.uk/safeguarding-child-protection/
- National Society for the Prevention of Cruelty to Children. Child abuse and neglect. Published
 2020. Accessed 04 October 2020. https://www.nspcc.org.uk/preventing-abuse/child-abuse-and-neglect/
- United Nations International Children's Fund. A League table of child maltreatment deaths in rich countries. Florence: United Nations Children Fund Innocenti Research Centre; 2003.
- 4. Gray D, Watt P. Giving victims a voice. Joint report into sexual abuse allegations made against Jimmy Savile. London: NSPCC and MPS; 2013.
- 5. General Pharmaceutical Council. What does a pharmacist do? Published 2020. Accessed 04

 October 2020. https://www.pharmacyregulation.org/raising-concerns/raising-concerns-about-pharmacy-professional/what-expect-your-pharmacy/what-does-0/.
- 6. Medical Protection. Safeguarding children. 09 May 2015. Updated 16 May 2020. Accessed 04

 October 2020. https://www.medicalprotection.org/uk/articles/wal-safeguarding-children/
- 7. HM Government. What to do if you're worried a child is being abused. Advice for practitioners. March 2015. Accessed 04 October 2020. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/419604/What_to do if you re worried a child is being abused.pdf/
- 8. HM Government. Working together to safeguard children. A guide to inter-agency working to safeguard and promote the welfare of children. July 2018. Accessed 04 October 2020. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779401/Working_Together_to_Safeguard-Children.pdf/
- Royal College of Paediatrics and Child Health. Safeguarding children and young people: roles
 and competences for health care staff. 3rd ed. https://www.rcpch.ac.uk/sites/default/files/2019-08/safeguarding-cyp-roles-and-competencies-for-paediatricians-august-2019-0.pdf
 August 2019. Accessed 04 October 2020.

- Leeb RT, Paulozzzi L, Melanson C, Simon T, Arias I. Child Maltreatment Surveillance: Uniform Definitions for Public Health and Recommended Data Elements. Atlanta: Centers for Disease Control and Prevention; 2008.
- 11. English DJ, Thompson R, Graham JC, Briggs EC. Toward a definition of neglect in young children. Child Maltreat. 2005;10(2):190–206 doi:10.1177/1077559505275178
- Sedlak AJ, Broadhurst DD. Third national Incidence Study of Child Abuse and Neglect (NIS-3 Final Report). U.S. Dept. of Health and Human Service Contract No. 1; 1996.
- 13. Garbarino J, Garbarino A. Emotional Maltreatment of Children, 2nd edn; National Committee to Prevent Child Abuse; 1994.
- 14. Putnam FW. Ten-year research update review: child sexual abuse. J Am Acad Child Adolesc Psychiatry. 2003;42(3):269-78. doi:10.1097/00004583-200303000-00006
- 15. Pharmaceutical Services Negotiating Committee. Professional standards and guidance for the sale and supply of medicines. April 2009. Accessed 04 October 2020. https://psnc.org.uk/walsall-lpc/wp-content/uploads/sites/56/2018/05/9.-Medicines-Sales-Protocol.pdf
- Tucker R. Tips to share with patients who struggle to sleep well. Pharm J. 2018;301(7919) doi:
 10.1211/PJ.2018.20205411
- 17. Ryan T, Brewer M, Small L. Over-the-counter cough and cold medication use in young children. Padiatr Nurs. 2008; 34(2):174-80
- 18. Royal Pharmaceutical Society. Protecting children and young people. Published 2019. Accessed

 04. October 2020. https://www.rpharms.com/resources/quick-reference-guides/protecting-children-and-young-people#children/
- Centre for Pharmacy Postgraduate Education. Safeguarding. Published 2020. Accessed 04
 October 2020. https://www.cppe.ac.uk/gateway/safegrding/
- Bellis M, Hughes K, Hardcastle K, et al. The impact of adverse childhood experiences on health service use across the life course using a retrospective cohort study. J Health Serv Res Policy. 2017; 22(3):168–177. https://doi.org/10.1177/1355819617706720
- 21. National Society for the Prevention of Cruelty to Children. Child Protection Fact Sheet. June 2010. Accessed 04 October 2020. http://www.attend.org.uk/sites/default/files/The%20definitions%20and%20signs%20of%20child %20abuse%20-%20NSPCC.pdf

- Pharmacies in Cardiff and Vale University Health Board. Published 2020. Accessed 04 October
 2020.
 - http://www.wales.nhs.uk/ourservices/directory/cardiffvaleuniversityhealthboard/pharmacies
- 23. Meysamie A, Taee F, Mohammadi-Vajari M-A, Yoosefi-Khanghah S, Emamzadeh-Fard S, Abbassi M. Sample size calculation on web, can we rely on the results? J Med Stat Inform. 2014; 2(1):3.
- 24. Gao X, Ye P, Er Y, Jin Y, Wang L, Duan L. Violence prevalence and prevention status in China. Injury Prevention. 2019;25(1):67-73 doi:10.1136/injuryprev-2017-042593
- 25. Kara Ö, Çalışkan D, Suskan E. Comparison of the levels of knowledge and approaches in relation with child abuse and neglect in residents of pediatrics, pediatricians and practitioners working in the province of Ankara. Turk Pediatri Ars. 2014;49(1):57–65. doi:10.5152/tpa.2014.984
- 26. Cockerill R, Tanner J, Barnsley J, Williams AP. Women and men managers in pharmacy: gender issues. J Health Adm Educ. 1999;17(3):199-210.
- Janzen D, Fitzpatrick K, Jensen K, Suveges L. Women in pharmacy: A preliminary study of the attitudes and beliefs of pharmacy students. Can Pharm J. 2013;146(2):109–116. doi:10.1177/1715163513481323
- 28. Raman S, Hodes D. Cultural issues in child maltreatment. J Paediatr Child Health. 2012;48(1):30-37. doi:10.1111/j.1440-1754.2011.02184.x
- 29. Sumption M, Vargas-Silva C. Long-Term International Migration Flows to and from the UK. Migration Observatory briefing, COMPAS, University of Oxford, UK, 2020. Updated 29 July 2020. Accessed 04 October 2020. https://migrationobservatory.ox.ac.uk/resources/briefings/long-term-international-migration-flows-to-and-from-the-uk/
- 30. Advisory Council on the Misuse of Drugs. Hidden harm: responding to the needs of children of problem drug users. London: The Stationary Office, 2003.
- Kuruppu J, Forsdike K, Hegarty K. 'It's a necessary evil': Experiences and perceptions of mandatory reporting of child abuse in Victorian general practice. Aust J Gen Pract. 2018;47(10):729-733. doi:10.31128/AJGP-04-18-4563

Appendix

Questions used during this study

- 1. When was the last time you received any training regarding the safeguarding of children?
- 2. How did you undergo your training?
- 3. Please state the provider for your training
- 4. Have you ever initiated a referral due to suspicious or evident signs of maltreatment towards a child/children
- 5. How many referrals regarding the abuse or neglect of a child have you initiated in the past year due to suspected cause or inappropriate over-the-counter-medication purchases?
- 6. Have you ever refused purchase of over-the-counter drugs to patients when you have suspected drug abuse towards children?
- 7. Please state which drug or class of drug you refused purchase
- 8. Do you think the training you underwent for the safeguarding of children was adequate to personally feel comfortable while initiating the referral process?
- 9. On a scale of 1 to 10 (1 being the least and 10 being the most), how knowledgeable do you feel:
 - To know when you should refer a suspicion of child maltreatment?
 - About who to contact, to alert your suspicion of the abuse of a child?
 - On the types of cover the counter medication that warrant the refusal of purchase, if you suspect drug abuse towards children?
- 10. On a scale of 1 to 10 (1 being the least and 10 being the most), how confident do you feel:
 - That you can suspect signs associated with the maltreatment of a child?
 - About knowing when to refer the maltreatment of a child?
 - Knowing who to refer to, to alert the abuse of a child?
 - Making a referral when you know the appropriate service to refer to?
 - To refuse the purchase of certain over the counter medication (e.g. antihistamines) if you suspect it is being used towards the abuse of a child
- 11. On a scale of 1 to 10 (1 being the least effective and 10 being the most effective) how effective do you think your training has been to aid you in recognizing the different signs of abuse in children?
- 12. Please match the type of abuse (physical, emotional, sexual or neglect) with the following actions. You can match more than one actions to a category of abuse.
 - Starving a child
 - Poisonina
 - Forcing inappropriate activities
 - Frightening a child
 - Suffocating
 - Bullying
 - Overprotection
 - Impaired health of child
 - Inappropriate touching
- 13. As a pharmacist, do you think your training was sufficient to tackle the issue of safeguarding children and do you have any suggestions as to how it could be improved or made more relevant?
- 14. What is your gender?
- 15. How long have you been qualified as a pharmacist?