

Appendix B _ Detailed Results.

Table 1.

Table 1 Confidence regarding handling falsified medicines ($p < 0.001$ One sample chi square test for all statements), percentages have been rounded to whole numbers.

	Mean (current study, n=101)	Std. Deviation (current study, n=101)	Mean (initial scale, n=50)	Std. Deviation (initial scale, n=50)	Mean difference	Std. Deviation difference
16. Falsified medicines pose a significant problem to the pharmacy profession.	3.89	1.067	4.02	1.078	0.13	0.011
17. Lack of knowledge is a barrier for detecting the presence of falsified medicines.	4.12	0.752	4.14	0.948	0.02	0.196
18. Lack of resources is a barrier for detecting the presence of falsified medicines.	4.1	0.806	3.94	1.077	-0.16	0.271
19. The dispensing pharmacist retains highest liability when falsified medicines reach patients.	3.44	1.292	3.4	1.278	-0.04	-0.014
20. A pharmacist's intervention can prevent or disrupt the supply of falsified medicines to patients.	4.09	0.793	4.12	0.824	0.03	0.031
21. Training courses can improve pharmacists' knowledge regarding falsified medicines.	4.24	0.764	4.06	0.843	-0.18	0.079
22. Listening to patients could help identify falsified medicines.	3.54	1.044	3.63	1.035	0.09	-0.009
23. The majority of my fellow pharmacists in the UK are confident regarding falsified medicines.	2.32	0.916	2.74	0.853	0.42	-0.063
24. I'm confident and capable in identifying falsified medicines.	2.45	1.005	2.62	1.105	0.17	0.1
25. I'm constantly vigilant of encountering falsified medicines when checking prescriptions.	2.77	1.13	3.04	1.195	0.27	0.065
26. I have enough knowledge to identify falsified medicines.	2.38	0.968	2.72	1.179	0.34	0.211

Table 2.

Table 2 Respondent's opinions on how to reduce falsified medicines from reaching the public.

Major theme	Sub-theme	Exemplary comments
1. Public health education.	a. Public education.	<ul style="list-style-type: none"> • "QC should be the watchword, enlightening the public to buy medicines only from approved pharmacy and use less internet pharmacies." • "More public campaigns to raise awareness, training for pharmacists to be more confident to educate or give information to patients."
	b. Professional education (of all involved in supply chain).	<ul style="list-style-type: none"> • "Education of how to recognise falsified meds - training of staff and what to do." • "Extra Information. Not had any information through." • "Better education to those involved in supply."
2. (Government) Regulation and enforcement.	a. Regulated online sales.	<ul style="list-style-type: none"> • "Reducing online sale of medicine or be more vigilant." • "Greater controls online purchasing. Less generics, so false medicines easier spotted."
	b. Regulatory Control.	<ul style="list-style-type: none"> • "Awareness and stricter consumer law in getting medication." • "Government responsible to prevent - if flow into the market either from Internet/EU imported medicines."
	c. Reclassification.	<ul style="list-style-type: none"> • "POM to P switches (e.g. Viagra)."
3. Supply chain management.	a. Role of the manufacturers.	<ul style="list-style-type: none"> • "I think this should be the role of the manufacturers and wholesalers not pharmacists." • "Monitoring of supply chains" • "Suppliers and wholesalers should be responsible and have a system to check in place."

		<ul style="list-style-type: none"> • <i>“Controlling the supply chain, strict checks and audits.”</i>
	b. Role of the wholesalers.	<ul style="list-style-type: none"> • <i>“Impetus on suppliers and audit - award levels based on compliance (gold, silver, bronze et cetera).”</i> • <i>“All medicines at wholesale level should be legitimate.”</i> • <i>“The wholesaler needs to do these checks.”</i> • <i>“Should be prevented at the wholesalers before reaching the pharmacy.”</i> • <i>“Constant vigilance, using only reputable wholesalers, not using the Internet.”</i>
	c. Role of all (manufacturers, wholesalers and pharmacy).	<ul style="list-style-type: none"> • <i>“Verify medicines at every step of distribution from original source. Have one system only (very difficult to achieve).”</i> • <i>“Checked at wholesalers as well as chemist level.”</i>
4. Serialisation (Track & Trace).	<ul style="list-style-type: none"> • <i>“Each medicine box have unique code which keeps a history of where it has been and which can be viewed.”</i> • <i>“Scanning the medicines prior to reaching patients.”</i> • <i>“online central database and scanning are better options”</i> • <i>“To include a certified mark or sticker that is difficult to copy on the packaging.”</i> • <i>“Electronic tagging.”</i> • <i>“Scanning boxes.”</i> • <i>“By original packaging and having hallmark. I don't think scanning a barcode will make any difference.”</i> 	
5. Reporting to the regulator, medical staff and internally to pharmacy.	<ul style="list-style-type: none"> • <i>“Yellow card, P.M.R [patient medical record], internal dispensing incident form.”</i> 	

Table 3.

Table 3 Pharmacist's role in combating falsified medicines.

Major themes	Exemplary comments.
1. Build into accuracy check.	<ul style="list-style-type: none"> • "Checking when completing accuracy check." • "If we can use scanning method to check, then for sure we can improve." • "Final Check and ensure dispenser check at point of assembly." • "Scan items." • "With enough training, pharmacists can play a strong role in identifying when dispensing." • "If there was a procedure in place it would be part of dispensing procedure otherwise little time." • "Crucial-all members of the healthcare team will be required to scan and verify medication." • "Scanning boxes."
2. Complex and multifactorial.	<ul style="list-style-type: none"> • "Embrace training and procedures, order through authorised suppliers, learn through other's mistakes, public information campaign, check medicines waste returned to us could identify an issue."
3. Education and training.	<ul style="list-style-type: none"> • "Be educated so that we can identify falsified medicines." • "With training - crucial role as gatekeeper." • "Being trained to recognise potential false medicines then using resources. To feedback and highlight common sources." • "With appropriate training able to identify these and intercept before reaching the patient." • "By right training, we can identify wrong/falsified medication." • "Undergo training." • "Doing what is asked of us but training/information should be provided and we have received nothing at all." • "The profession needs more awareness and knowledge in identifying falsified medication."
4. Identify and report.	<ul style="list-style-type: none"> • "Help identify and report them."
5. Not pharmacist's role.	<ul style="list-style-type: none"> • "Would hope supply chain deals with this?" • "Pharmacists already have their hands [full] with their every day job, so it is unrealistic for pharmacists to check whether it is a genuine medicine [with their] naked eyes. Wholesaler should take responsibility in sourcing genuine medicines." • "Better alerts issued to pharmacists, wholesalers BIG role to play."
6. Public awareness.	<ul style="list-style-type: none"> • "Advising the public and spotting counterfeit medication." • "Advise." • "Raise awareness among patients."
7. Regulator's job.	<ul style="list-style-type: none"> • "I do not want to play a role in falsified medicines. Should be a government job."
8. Reputable sources.	<ul style="list-style-type: none"> • "Only ordering from reputable sources." • "Source trusted products from valid/trusted wholesalers." • "Ensuring we never source or supply them and patient awareness." • "Use trustworthy wholesalers."
9. Resources.	<ul style="list-style-type: none"> • "Knowledge and resources."

10. Vigilance and action.	<ul style="list-style-type: none"> • <i>"Being vigilant of falsified medicines and what to do in the event of finding one."</i> • <i>"Identify and improve patient safety."</i> • <i>"Be vigilant."</i> • <i>"Be vigilant and be trained."</i> • <i>"Be vigilant."</i> • <i>"Being diligent in spotting/ watching out for."</i>
---------------------------	---

Table 4.

Table 4 Additional comments.

Major themes	Exemplary comments.
1. Not a pharmacist's job.	<i>"To identify falsified meds. It shouldn't be left to the pharmacist, their jobs are hard enough!"</i>
2. Quality Supply chain.	<i>"Being chain pharmacy our each item is coming from certified suppliers which make me think there shouldn't be any falsified medicine in my store."</i>
3. Technical difficulties.	<i>"Already the change of packaging has caused out of stocks of medicines, while they get the new boxes implemented which causes problems."</i>
4. Wholesaler's duty.	<i>"Falsified meds should not have been able to reach community pharmacy in the first place. Any falsified meds should have been caught at the wholesaler but not at the pharmacy! The whole idea of scanning every box during dispensing is purely stupid. Waste of time and effort! Wholesalers should be the one making sure no falsified meds reach the pharmacy via delivery in the first place."</i>
5. YCS ineffective.	<i>"Not sure yellow card scheme is a useful tool for falsified medicines."</i>