The last apothecary: Eric Knott (1896–1993) and 20th-century pharmacy in Scotland

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Eric Knott was the last Apothecary at the Royal Public Dispensary and the last Principal of the Duncan School of Pharmacy. He linked pre-war apothecary practice to post-war chemist dispensing. This paper tracks his career from the Duncan School of Pharmacy, transfer to Heriot-Watt College in 1936, to the close of the Royal Public Dispensary in 1963, when the premises were transferred to the University of Edinburgh. It draws on unpublished archival

material and long unseen collections from National Museums Scotland to explore what Knott's career can tell us about the impact of new legislation and the introduction of the NHS on pharmacy in Scotland.

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Eric Knott

I became aware of Eric Knott and his career as an apothecary through objects in our collection here at the National Museum of Scotland. In particular, a selection of pharmaceutical jars, which are currently on display in our Science and Technology galleries that opened in July 2016. These jars were from two collections that had been stored in our museum storage facility but had not yet entered our permanent collection. I was interested in how two pharmacy collections had entered the museum and what their provenance may be. Research into our object files provided the donors of both collections, Eric Knott and Heriot-Watt University, by way of Eric Knott.

Eric Knott's career spanned great changes in the practice and teaching of pharmacy. His apprenticeship occurred during the introduction of National Insurance and he finished his career by helping to establish the first department of General Practice in the world at Mackenzie Medical Centre. In the interim he trained thousands of pharmacy and medical students, and dispensed to many more patients in need throughout Edinburgh. Despite his involvement in pharmacy and medicine in Scotland, Knott has been largely forgotten. This paper will reveal his life, his contribution to pharmacy in Scotland and finally how he has been remembered.

Eric Knott's early life

Eric Knott was born in Girvan, Ayrshire, in 1896. His father was a newspaper editor for the weekly paper in Girvan. Two of his brothers went on to work in the newspaper business with their father but after a summer spent in his uncle's pharmacy Knott instead chose pharmacy. He became an apprentice at Gib Graham's Girvan pharmacy, with carboys in the front windows (Figure 1). He recalled later in life collecting cod livers at the quay for cod-liver oil and visiting gas works to obtain slaked lime.

Knott completed his apprenticeship just as the First World War began. Given the option of joining the military or starting classes towards his qualifications, he joined the army. In action he was wounded twice, received a promotion for gallantry and returned as Acting Sergeant-Major. When he returned to Edinburgh he began working at JA White's pharmacy in Goldenacre as an assistant, and took classes towards his chemist and druggist qualification at the Duncan School of Pharmacy at the Royal Public Dispensary.¹

Royal Public Dispensary and Duncan School of Pharmacy

Andrew Duncan, President of the Royal College of Physicians of Edinburgh, established the first public dispensary in Scotland in 1776. Poor patients could be treated for free at the Royal Infirmary hospital nearby, but those patients who needed care outside hospital and could not pay previously had nowhere to go. Purpose built dispensary premises opened in 1783 and were not only a place for patients to be treated, but were also a place for medical students to be taught, and prescriptions dispensed.

In the 1870s William Duncan (no relation to Andrew) was appointed the Dispensary's apothecary. The role of Apothecary

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Figure 1 Image of carboys from Eric Knott's collection on display in the Natural Museum of Scotland's new galleries. Reproduced with kind permission from National Museums Scotland



at the Dispensary was to prepare and dispense medicines prescribed by the Medical Officers, and their Assistants, and to provide help to emergency cases that arose at night. The Apothecary was to be on duty from 9am to 9pm every day, much longer hours than the Medical Officers. The Apothecary was originally allowed to take on Apprentices and Students, but no more than four at any one time.²

Duncan was a popular teacher, and around 1880 he established a School of Pharmacy, often known as 'Duncan's', at the Royal Public Dispensary on West Richmond Street in the Southside of Edinburgh (Figure 2). When Duncan formed the school teaching conditions were cramped, but after the end of the First World War in 1918 there was an influx of students – including Eric Knott – and the Managers restructured the Dispensary so the school would have more space.³

Eric Knott trained under William Duncan and became his protégé. As he completed his course he was asked to stay on as a Junior Lecturer and was promoted to Duncan's Senior Assistant in 1920. In that same year the Pharmaceutical Society of Great Britain began appointing teaching institutions

for pharmacy and introduced new examination regulations. Prior to this a pharmacy student could receive training when and however they wished, as long as they studied for 3 years and passed the exam. Now students had to train at a recognised training institution.⁴

A letter from William Duncan to Mr Macpherson, one of the Managers of the Dispensary, on 2 June 1920 identifies the problem with the change that would eventually bring down the school:

The society are doing all they can to get the training into Technical Schools like Heriot-Watt, and needless to say, such places are doing their best to secure the students. Everything is in their favour save a dearth of qualified lecturers and teachers.⁵

Heriot-Watt College, a recognised training institution, was seen as a real threat to the school, and Duncan looked to increase the Dispensary's teaching facilities and acquire more up-to-date equipment. In a letter to the Managers, Duncan cannily pointed out that the surplus amount in the Dispensary's accounts (£572) was largely due to the Pharmacy Teaching Department's fees. His letter achieved the desired effect and Duncan received everything he requested, £300 towards apparatus, and an additional room fitted out for microscopy.⁶

Duncan's successor

Work at the Dispensary continued in much the same way until a meeting of the Managers on 1 April 1924 when William Duncan handed in his resignation as Apothecary and Principal of Pharmacy after 39 years. In the same meeting Duncan suggested that Eric Knott take over as his successor.⁷

At 29 years old, Knott had been Duncan's Assistant for 5 years and was confirmed as the new Principal of the School of Pharmacy and Joint Apothecary with Mr Mackenzie, who had worked with Duncan for 34 years. Mr Mackenzie was passed over for the position of Principal as he was 57 years old and had no desire to take over the position so close to retirement.⁸ Not long after the appointment Mr Mackenzie retired and Knott became the sole Apothecary (Figure 3).

Knott officially began his duties on 30 June 1924, on a yearly engagement. He was given a salary of £325 a year, as long as he received recognition from the University of Edinburgh as a teacher of practical Materia Medica, which he did in 1925. When he began his role the Dispensary served over 2,500 people a year and the School of Pharmacy had 36 laboratory benches and 40–50 students taking evening classes. Hwas a thriving institution, but there were concerns about the School of Pharmacy continuing to be recognised as a training institution by the Pharmaceutical Society of Great Britain. This recognition had been secured by Duncan a few years previously, with great difficulty. The Managers of the Dispensary worried that if the school became seen as a 'private school' the recognition given by the Pharmaceutical



Figure 2 A corner of the Royal Public Dispensary teaching space. Reproduced with kind permission of the Wellcome Library, London

Figure 3 Eric Knott in 1924 when he became Principal of the Duncan School of Pharmacy and Joint Apothecary. Reproduced with kind permission of the Wellcome Library, London



Society of Great Britain to teach the druggist and chemist qualification and pharmaceutical chemistry would be withdrawn.8

While the Managers did not know it, the future of Duncan's was indeed at risk. The Pharmaceutical Society of Great Britain was at the time, behind closed doors, discussing the future of the teaching of pharmacy throughout the country.

Eric Knott as Apothecary and Principal

Oblivious to this ongoing threat Eric Knott settled into his role as Principal and Apothecary. He contributed more to the sector as a whole, playing an important role in the Edinburgh Chemist's Assistants and Apprentices Association, becoming President of the Association. Knott also was a keen botanist and throughout his involvement in the society led many botanical 'excursions' for the members of the society.11

The importance of William Duncan's legacy weighed heavily on Eric Knott, who described his own teaching method as, 'both students and teachers working hand in hand to ensure the reputation should not be tarnished and the tradition [of Duncan's] worthily upheld'.3 The school was the centre of Knott's life and he even met his wife there, who was one of his students.12

Knott had his first encounter with legislative issues around pharmacy teaching in 1928 when the Fife Education Authority passed a resolution that meant students studying at Duncan's would no longer be eligible to receive grants. Instead, students from Fife would have to study at Heriot-Watt College, a 'central institution'. This change led to seven students dropping out of courses at the Dispensary as, without the grant, they could not afford the fees. Knott and the Dispensary Managers appealed to the Scottish Education Council, but received no reply. Only after multiple letters did they get an answer: the Scottish Education Council declined to intervene. The Managers of the Dispensary were concerned the new 'central institution' rule by the Education Authorities was engineered by the Pharmaceutical Society of Great Britain and would spread to other Scottish Education Authorities.13

New regulations from the Society came into effect in July 1929 that increased the length of the course from 9 months to 2 years. The immediate effect of this was a decrease in the number of students who applied for bench spaces at the Dispensary.14

The end of Duncan's

The legislative problems for the Dispensary came to a head in 1930 when the Pharmaceutical Society inspected the Dispensary and in the autumn granted recognition for the teaching of pharmacy at the Dispensary, but only for that session, and not for the major examination.15

Shortly after this, Knott and the Managers of the Dispensary received a letter from Mr Rutherford-Hill from Heriot-Watt College suggesting a meeting to discuss a scheme for a joint school of pharmacy between the organisations.¹⁶ Originally the Dispensary was enthusiastic about the proposal. The school would be the first of its kind in Scotland, and was to be based on the set-up between the Pharmaceutical Society in London and University College London, in which the institutions remained separate entities.

Discussions between the institutions lasted over 3 years, with arguments focusing primarily on the division of teaching. At the time pharmacy teaching was split into two exams, Part I and Part II. Part I, often referred to as the preliminary science exam, covered chemistry, physics and botany. Part II was far more practical and included Materia Medica, applied pharmacy, dispensing and poisons law. Heriot-Watt College was unwilling to give up the whole of Part II teaching, while the Royal Dispensary wanted a clean break between teaching areas.¹⁷

In the end the agreement for a joint school failed, the Pharmaceutical Society became involved, and the Royal Public Dispensary lost their entire pharmacy teaching department. The Society decreed that the teaching of all courses of study at the Dispensary should cease and all students be transferred to Heriot-Watt College. As the Pharmaceutical Society was responsible for allowing institutions to teach pharmacy the Managers of the Royal Dispensary had no choice but to accept their edict, in favour of Heriot-Watt College. They did, however, wish for the name of the Royal Public Dispensary to be preserved and for Eric Knott to become the Head of Pharmacy at Heriot-Watt College. 18 Neither was to be.

Instead, at a meeting of the North British Branch of the Pharmaceutical Society, the Royal Public Dispensary, Heriot-Watt College and the Pharmaceutical Society decided that Eric Knott would become a lecturer in Pharmacy at Heriot-Watt College and arrangements would be made so that he could continue working as an Apothecary at the Royal Public Dispensary.¹⁹

Heriot-Watt College

After the official closure, Knott himself wrote a eulogy of sorts of the Duncan School of Pharmacy in the Chemist and Druggist, quoting Tennyson and speaking of the new 'regime' (Figure 4).³ A former student wrote in later years to say:

Those of us who belong to that, alas now dwindling, band who trained at Duncan's will fully appreciate the debt which we owe to Eric Knot [sic] for the unstinting efforts which he made to prepare us for our finals and it seems to me that Heriot Watt college [sic] must have derived considerable benefit from his enforced transfer of allegiance.²²

In 1939 Knott was mobilised as a sergeant in the army and stationed in the Middle East where his pharmaceutical and botanical skills were put to good use. He was asked while there to help identify the contents of illegal drugs, most often hashish, and even grew Indian hemp plants for the local police so that they could identify them. He also used his chemistry knowledge to help identify a counterfeit silver Maria Theresa Dollar.¹

He returned home in June 1945, and a few hours after arriving was already back in the practice of dispensing, filling in for a sick pharmacist friend. While he was away the Managers hired a Dispenser, but his title was clearly Dispenser and not

Figure 4 A sketch of Eric Knott from the 'Figures in the Pharmaceutical World' featured in the Chemist and Druggist.¹ Reproduced with kind permission of the Wellcome Library, London



Apothecary. 23 When Knott arrived back at the Dispensary in September 1945 to ask to resume his duties as Apothecary, his replacement Dispenser was immediately dismissed and Knott began back at the Royal Dispensary as Apothecary on 1 November 1945. 24

The NHS

With the incoming introduction of the NHS in 1948, the Managers of the Dispensary had a decision to make. In the minutes of the meeting of Managers they laid out the three options they saw:

- 1. To carry on as at present, when the test of whether the institution was fulfilling a useful purpose or not would be seen from the number of patients attending.
- To carry on in co-operation with the University as a teaching health centre.
- To cease, and allow the Department of Health to take over the building.

They decided that the second option was the best way forward and began work to create a joint scheme with the University of Edinburgh. This would ensure the medical students could continue to gain relevant experience at the Dispensary, as they had been since its opening. The scheme had a number of supporters including Professor Crewe from the Faculty of Medicine, who was particularly interested in the positive effect of the University's medical students being taught at the Dispensary.²⁵

On the first official day of the NHS, Richard Scott, Lecturer in the Department of Public Health and Social Medicine at the University of Edinburgh, set up a general practice in the Dispensary, alongside an almoner, a nurse, a dentist and a medical assistant, establishing the first Department of General Practice in the world. Scott became the first Professor of General Practice in the world at the University in 1963.²⁶ Reports stated, 'They, with the dispensary apothecary, they created a centre for the local community where health and welfare would be promoted, where patients would be treated, where medical students would learn, and where research would be undertaken'.27

Work between the University and Dispensary continued this way for some years. Knott worked considerably longer days and the amount of dispensing he performed at the Dispensary increased.²⁸

Modernisation of the premises were discussed by the Dispensary Managers at a meeting in 1961, but was decided against as it was agreed when Knott retired it was likely the Dispensary would have to close.²⁹ It was decided at that meeting to approach the University and offer the premises of the Dispensary to them permanently, but at that time the University declined pending an update of the premises.

The accounts in 1963 closed with a deficit of over £300. due to the decrease in payment by the Executive Council for prescriptions. Mr Knott explained in the meeting that the Executive Council was now providing a lower rate for prescriptions and the introduction of a charge for prescriptions meant that patients were not taking as much medicine.

The proposed modernisation and alteration of the building was further discussed in management meetings after it was decided to donate the building, and as part of that plan the dispensing room size would be decreased. Knott voiced an opinion that the shrinking of this room would negatively affect the ability of the Dispenser to fulfil his duties. The Managers decided to ignore his opinion as, 'the question of finding a successor to Mr Knott when he retired would be a difficult one and it was possible that dispensing may cease'.30 Knott's method of working and career no longer existed in the same way it had when he began.

The teaching of general practice continued in the building, as it was, until 1963 when the trustees of the Dispensary donated the premises and the remaining funds to the University. Originally the plan had been to refurbish and modernise the centre before handing it over to the University but that proved too costly for the Dispensary alone to fund.

The last meeting of the Managers of the Royal Dispensary was held on the 3 October in 1963, when a resolution was passed unanimously to transfer the premises and assets of the Royal Dispensary to the University of Edinburgh. The Old Dispensary, as it was known, became the Mackenzie

Figure 5 A collection of pharmacy jars from National Museums Scotland collection, donated by Eric Knott. Currently on display in the Enquire gallery. Reproduced with kind permission from National Museums Scotland



Medical Centre and the first department of general practice in the world.31

Commemorating Knott

The introduction of National Insurance in 1911 and the NHS in 1948 changed the landscape of pharmacy in Great Britain, resulting in the redundancy of Dispensaries throughout the country and a change in the way medication was prescribed, and taken. As a result the Apothecary, a previously useful GP cum-pharmacist, became redundant as well. Mr William Low, a former student, said at Eric Knott's retirement party in 1964, 'Mr. Knott was not only one of the world's greatest chemists but he was a great teacher'. 12 In the end Eric Knott was training students for a profession that no longer existed in the same way it did when he was an apprentice gathering cod-livers by the quay.

Eric Knott was both the last Apothecary at the Royal Dispensary and the last Principal of the School of Pharmacy there (Figure 5). But he has been largely forgotten, as has his predecessor William Duncan, even though these two men taught thousands of pharmaceutical students from Scotland, and further afield.

If he is remembered today it is by the Scottish pharmacy prize bearing his name. He gave out the first Eric Knott Branch Prize, sponsored by The Pharmaceutical Society's Edinburgh and Lothians Branch, to Miss Fiona Simpson in 1976.32 The prize continues today as the Eric Knott Medal, awarded to a preregistration pharmacist as part of the Lothian Pharmacy Awards.

His legacy can also be found in material culture. Eric Knott held on to a number of pharmacy jars from the Dispensary,

and in 1983 was approached by JJ Ferguson, a doctor at the Mackenzie Medical Centre, who had just realised that the Centre had been the Royal Dispensary. To honour the history of the building he hoped to put up a display in the Centre with help from Wellcome Foundation and wrote:

Eric Knott is now about 90-years-old and has a collection of 'things' which he might be prepared to give us for display purposes. The difficulty we have a [sic] the moment, however, is that until we have some sort of proposal to put to him it is unlikely that Mr Knott will be prepared to part with any of his pharmacy relics.³³

Mr Knott was enthusiastic about a permanent display at the School of Pharmacy, and correspondence began between the parties at the Medical Centre and Wellcome Foundation to secure funding. These plans included permanent display cases, a painting of Knott, and even a watercolour of the original Dispensary.

In the end it was the suggestion in 1984 of Dr Brian Bracegirdle, keeper of the Wellcome Museum of History of Medicine, to transfer Eric Knott's collection of objects from the 'old dispensary' to the National Museum of Scotland, in part to calm Knott's fears that his collection would be separated. While discussion about where the objects should go continued internally, the first batch of glassware was collected on Tuesday 8 December 1987. Until 2017 they

remained unaccessioned, and in storage. The display at Mackenzie Medical Centre never materialised.

Heriot-Watt University absorbed the vast majority of the pharmacy collection (although the majority of objects have been disposed of), which has recently been audited. The original audit, conducted in 1995 following an 18-month project, concluded the collection in general related to teaching, but it was impossible to say if any material from the Royal Dispensary survived. The report read, 'Despite the long history of teaching associated with the Royal Dispensary, it seems that few, if any, material has found its way from this source into the collection'. [Internal National Museums Scotland Report, 1995]

Of the thousands of objects in the original pharmacy collection held by Heriot-Watt, 124 objects were transferred to the National Museum of Scotland in 2000, and 1,500 objects have now been transferred to museums across Britain [Personal Correspondence, 10 May 2017]. As in the case of the collection from Heriot-Watt we do not know which of the objects from Eric Knott's personal collection are likely taken from the Royal Dispensary, and which were used in his later teaching.

Some of Knott's collection of 'things' are finally on display in the new Science and Technology galleries at the National Museum of Scotland in the Enquire gallery alongside Nobel medals, a stone's throw from where they were first used. •

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