Hello and thank you Toni for joining us today. We've got Toni Mount here, who is an author of non-fiction and fiction and a specialist in the Medieval and Tudor period. Toni also has written various courses for MedievalCourses.com and particularly, "Everyday life of medieval folk" that this talk today really corresponds with.

We're going to talk today about medieval medicine, but first of all Toni, can you just introduce yourself to us and tell us just a bit about your background please?

Well, hello Claire and Tim. Yes, my background, I actually became interested in medicine right from my very first career. There I worked in biological research.

Ah

with the Welcome Foundation. Which is now Glaxo Smith-Klein but then it was Welcome. And I got interested in medicine. And then at the time interest of my hobby of history became more strong, so I was especially interested the history of medicine. [unknown]

And it went on from there. I did my Masters at the University of Kent, but I never really went to that University. I did all my research at the Welcome center in London which has a brilliant [unknown].

Ah, OK. It's funny how you start of with history as a hobby and then it takes over. The same here, you know, it's now what I do every day. So it's amazing how history takes over your life really. It's brilliant though.

OK, so I think that's answered the first question (it's answered it very well). I think Medieval medicine is one of those things that, because we see these programmes on telly, thinks like Horrible Histories where you see them amputating people's arms and legs, it, you get interested in Medival medicine.

Question two. What was thought to be the causes of illness in Medieval and Tudor times. Why did they feel that they were ill?

Well, the most outrageous thing was that it was thought that illness came from God.

Yes. Punishment.

So God was punishing them by subjecting them with an illness. And led to incredible problems because as soon as you felt ill, your best bet was to go to a priest.

Ah, OK.

And do a penance and see if you could ask God for a quick remedy. So it meant that in the case of more serious illness that you had to go on a pilgrimage which would add to your .. and hopefully you'd recover. But whatever, the church was in sickness it thought that to mediate the symptoms of an illness made you more ill.

How interesting

It was important that you suffer the pain and to mediate the symptoms endangered both the soul of the patient and the doctor who tried to help them. So that was one notion. But fortunately at the same time there were other people, other church people, so it []. It must have been God who gave you the cure. So not to use it is also bad. So as you can see it's very complex.

Very difficult. Yes.

[unclear]

OK. And what about the four humors as well. Because you read a lot about them in books of the time.

Yes, well the four humors made up every living thing. The four humors of ancient Greek medicine and it was [] and consisted of blood, phlegm, cholera and melancholy or yellow bile and black bile as they came to be called. And these four things had to be pretty much in balance in the body. If they got out of balance you became ill.

Every person actually had an excess of one or other of the humors.

Yep

So if you had an excess of blood you would [] and it's said that with black bile you were melancholic. Phlegm and you were phlegmatic and yellow you were choleric. So everybody did have a natural flow.

OK.

It would lead to a condition just what that imbalance could actually do and

OK. Yeah. So what you were like, what your personality was like and what needed fixing. OK. You mentioned about how, thinking that it was a punishment from God that you were ill, so, obviously, people would go to their priest and perhaps do pilgrimages, but who else would people turn to if they'd injured themselves or if they were poorly in some way. Who were the people they would go to for help? 8:16

Well []

Hmm.

8:52 Well we know now that

Because medicine women were expected to have some knowledge of treating minor ailments. Rosehip syrup.

I remember having rosehip syrup as a child. *I* think *I* probably did too.

So that's the basic stuff that the housewife would do . But if you needed something special you might go to the village wise woman who specialised in brewing what were called "simples". That is a single herb that was brewed up and [9:29] but that was a "simple" rather than a "compound". If they couldn't do anything for you could go to your local apothecary. But only if you lived in a town. You couldn't do that if you lived in the countryside. And for apothecaries, is nowadays it's the pharmacy. They not only sold over-the-counter medicine, things that they made themselves, but they would fill prescriptions written for them by people higher up.

Ok.

Next, you had a surgeon. The surgeon treated external problems. So things like skin problems and things that he could get at from outside, like piles. [10:49] and even bladder problems.

Who did teeth? Yeah, who did if you had a bad tooth?

That was surgeons, or even [] but pulling teeth was a very ordinary thing.

Horrible, though. If you think about how much anesthetic you want at a dentist.... and what about if you broke a leg or your arm.

That is the surgeon.

OK

They were pretty good at fixing broken limbs. And it was external. As the flesh wasn't broken it wasn't a compound fracture. That was a problem because of infection.

And then you move on to the university trained doctor. If you had internal problems, those would be imbalances with the humors. But actually, they didn't do a lot of good.

The doctor might be ancient [] in truth it's just because they had no way of stopping the bleeding, of reducing the blood pressure so you bled less and then you got an infection. But what they didn't do, which only nowadays you can do, [12:54] they would have just drawn bile.

OK

If it's outside.[] hot spicy things. For example, if you had a cold, if you ate treat them with hot spicy things to boost your blood level.

OK. Which actually makes some sense, and you can see why that would actually make people feel better. And therefore the whole thing continues on. Well if you think about, I can remember, I'm sure my grandparents putting their feet in a mustard bath, a foot bath. If you were feeling fluey or you had a cold and obviously mustard is hot. Hot spicy thing. And beef broth if you're feeling unwell with flu or something. Beef broth does make you feel better.

And how much did medieval knowledge progress during Medieval and Tudor periods?

That's a bit of a tricky one because firstly during the Tudor times it was war time so the battlefield surgeons got to see the internal workings of the injured. They did start to use more advanced techniques. A man called Ambroise Paré was French but was around in the Tudor period and he really did try out new ideas. One of which has been proven today. There was a little lad who took gunpowder from the gunpowder store, and the gunpowder caught fire and Paré had heard of a wife healer, that she treated burns with onion skins. And he tried it on this boy. And the boy recovered amazingly.

Oh wow. How interesting. Interesting that the knowledge came through from a wise woman but only became accepted once a man had experimented and tried it out for himself. She'd obviously used it on countless occasions.

So surgeons and surgery was advancing, but the doctors weren't.

OK

It was felt that you still had to use the ancient Greek and Roman texts [] and the reason for that was that the church felt that when God created Adam around the year 4000BC, Adam was given all knowledge. Adam knew everything. And once Adam fell from grace, all generations forgot a bit more. So they actually saw themselves as being more and more ignorant. So they went back to the ancient Greek that they all accepted because they thought that Adam.

So the older you could read, the closer to the true knowledge that you got. The older the texts. How interesting. And yet that's obviously completely back to front because people learn new things and make developments.

[17:32] They thought that they were ignorant.

How interesting.

How much did the church influence that perspective?

The church influenced it a great deal. I think it was in 1258 Friar Roger Bacon, an Englishman from [] actually said that doctors ought to do their own research and experiments and stop reading the ancient text. And the church had him imprisoned for being so rebellious.

Very rebellious.

So his village [18:28]

The other day I was watching Outland, which is, you know, historical fiction in the 1700's and it was interesting seeing the heroine Claire, who was works as a healer, and she was in Paris and there was a lady that had got diabetes. You know, something we can manage very, well not easily today, but we can treat, and people can live normal lives with it. But this woman was being, you know, they said that there was no hope for her, she was going to die. So it just made me think about, what diseases or disorders or whatever that can be easily treated or managed today would actually have been a death sentence in the Medieval and Tudor periods?

Of course, something like appendicitis.

Ah, yes.

Which was unknown. They didn't even know what the appendix was. Most of their anatomical knowledge came from pigs.

OK

Pig are similar internally with humans. But they don't have an appendix.

Ah, ok.

So this serious concern was known as the "right side illness".

Ah, I've come across that. Now I know! You've learned something new today. That's good!

And obviously, if your appendix burst ...

That was the end of you.

A lot of quite minor ailments or minor injuries could be [fatal] including tetanus and septicemia and things like that.

Puerperal fever, yeah, childbed fever was obviously a

They expected that [20:34] that the blood poisoning [unclear] that at birth they might die of septicemia that it was blood poisoning.

Oh OK.

Because you know that the instant that she died that something suggested that something wasn't coming out but also that she wasn't eating or drinking. And it's though that what she could have had was an abscess under a tooth. Which would have filled the whole mouth eventually and made it difficult to eat and drink. And that if the abscess burst, that would have been the end.

So, something that yeah, you know, I've had abscesses in the past and you go to the dentist, you get it sorted out. But that's treated by antibiotics. A big course of antibiotics. And then you'll be OK. Although actually I started off, I remember, with one abscess, rinsing with salt water. That was meant to be the best thing to do, wasn't it.

Well, anything we now treat with antibiotics would have been fatal.

Yeah, of course.

But having said that, they did actually. They didn't understand antibiotics but they had discovered them. For example, they did wash a wound with wine which is antiseptic and they'd treat it with honey.

Yes

And a large open wound would be packed with sphagnum moss. The stuff they use in flower arranging. But it has got antibiotic properties.

So, they didn't know that they were antibiotics, but they knew they worked

Yes, they didn't know why it worked but they did ...

I find it interesting that today we're turning back to these natural remedies. I mean, Tim and I, for example, I've talked in a chat on the Tudor Society, how we're actually trying to go back to natural things. We're trying to cut down on chemicals in the home. And I've been using honey, on my hair and as a face wash. And it's supposed to be very good for teenage skin, spotty skin, because of its antibacterial properties. And I suffer from hayfever and I used a tinture of parsley, which was parsley in alcohol, and absolutely it worked.

So, you've mentioned honey, but what other things are we introducing today in medicine that the apothacory or the house wife or wise woman would have used in those times. What things are making a comeback?

Well one thing that is definitely come back now. There was a book called the leech book, now leech is the anglo saxon word for doctor, and was also a name for those black slug-like things because they can [24:23] there was a book in the time of Alfred the Great by a man called Bald. Who had added a recipe which included onions, leek, garlic, and wine all packed together and it must be in a brass pot.

A couple of years ago, his recipe was the subject of research at Nottingham University

Oh, wow.

They made it according to his instructions knowing that garlic and onions and also the ascetic acid had certain antibiotic properties. They also discovered that the copper in the brass made copper salts which also has an antibiotic. And this remedy was supposed to treat a sty on the eye. But when they experimented, what they found would actually cure MRSA in modern times.

Wow. That's amazing

So now they're re-looking at a lot of these old recipes, knowing they might enrich medicine and which they'd never have known why.

And with the way that we can't rely on antibiotics as much now, because there are so many antibiotics that don't work, that have lost their potency. That's really interesting. I hadn't heard about that.

It was reported in the Lancet

Ok, I'll have to dig around for that. We should make some. Yeah.

So there are always things like onions and those leeches which have been brought into modern medicine. Because, yes, they suck your blood. But leeches also take the excess from any [] that the host [] so, and leeches spittle can have antibiotic, antiseptic, anticoagulant, anaesthetic - all those things which are now being looked at again. And it's also used in surgery. If you've chopped your thumb off, modern surgeons can re-attach it. The nerves and skin and everything. But the one thing it cannot do is re-attach the fine blood vessel. They are thinner than a hair. And they complete the circulation of the blood. The [] needs it. All the goodness is taken from your blood and it's sent back though the veins in the flesh. But those veins can actually re-grow, if you can keep the flesh healthy.

[28:36] so the leeches suck out the blood, so that fresh blood continues flow. Otherwise ...

And what about maggots as well. Haven't they started maggots?

Yes. Maggots are brilliant for cleaning up all the damaged flesh, and clean up the rubbish back to clean, live flesh. Which can then heal.[29:30]

And there are also herbs which have made a comeback. A favourite migraine treatment of Medieval times used the herb bettany and barberry root. Both of those are now used to treat migraines and also meadow sweet which is actually one of the origins of asprin. But meadow sweet has been discovered to be much kinder to the stomach lining. So they're researching that now as it is though that it can be used as a commercial asprin.

Yes, amazing. I think it's really good that these ... I prefer to take them that way as well. We use a lot of essential oils and herbs because we don't want to use all the chemicals. Because you don't know... they've refined down the one major ingredient which the scientists think is therefore is going to give you the best benefit, but you don't know what all the other things in combination do for you.

Have you tried snail gel?

Snail gel! No! Tell us what snail gel does.

You can buy it. It's usually lemon scented and in medieval times, if you burnt your finger, you would rush out to the garden and find a snail and smear it. It gives a reduction in pain, healing and antiseptic. Think about the poor snail going across the rough gravel and dirt. It's going to get scratched so its slime has medicinal properties that help heal.

Isn't it amazing that people just knew these things in the old days because somebody though "oh, I'll try it" and it worked and then it gets passed on down through your family and it gets passed on through your village, and it get's passed on as long as it's not to revolutionary and it's not too against the established church. Then off it goes.

But then you think about when we were children, you got nettle rash. You'd look around for a dock leave to rub on it. And today, we've got, living here in Spain, aloe vera growing in our garden and when we've got sunburn and we haven't got any aftersun, we cut off a leaf and squeeze out the gel from that to cool down sunburn. Yeah, you make use of the things that are ... you laugh at me using "emu oil" on my skin. I do, but the Tudors didn't use emu oil.

No, they didn't, but you laugh at me and it works and takes away inflammation and scarring.

So you told us about some weird and wacky treatment there like snails, I love that. What other weird and wacky ones or ones that we'd actually see as plain dangerous. What wouldn't we do today because now we know better?

Well, I'm afraid there were an awful lot of treatments that were hazardous. It does seem that owl, in particular, were used for things like gout. And you had to take your owl and kill it, and put it in the oven and bake it until it was ash and then the ashes of your owl would be seen as a good treatment for gout. And even more nasty was to take puppies so young that their eyes were not even open, blind puppies, and boil them and [use them as a treatment].

Yeah, um, we wouldn't do that as a treatment today. That's not recommended.

No, there's also a recipe for quinsey in which you have to take ashes [not clear! but it involves hedgehogs and bears!34:34] and then you use it to [not clear ... sorry!]

Yes, I think I came across one where you had to put a pigeon's bottom against your foot or something. I can't remember what that was for! But I'm thinking, why would you want to put a pigeon's bottom..

It was a very very common treatment [35:24] now what they thought is that if your humors were out of balance in your brain, you needed to pull the excess away. And pigeon dung was brilliant for that, so they thought. They would apply it to the soles of the feet and draw the humors away from your brain. And pigeon dung drew things away from the head. So it may be, it could be the pigeon's bottom was dung applied to your foot. There's also a thing called dust [unclear]

And what about things that were dangerous. Things that could actually do more harm than good. Was there anything really bad?

Well, some of the really bad things were actually used in healing.36:45

We were talking earlier about having a tooth out, and how you liked anesthetic. Well you could have anesthetic in Medieval Times. It was called dwale and it contained hemlock, henbane, opium.

And even a small does could probably be fatal. But, the idea was that you took this dwale with a secret ingredient which was black peony. It is a very efficient laxative. So the way it was, they took the anesthetic which would put you to sleep, but before it did any further [damage38:08] it was passing straight through you, so it wouldn't kill you.

So that must have been a right balancing act at giving you the right amount so that it passed through you before it harmed you, but it also was still enough to keep asleep long enough for you to have whatever procedure you were undergoing.

It was generally only given to them when the surgeon thought there was enough pain.

Right, OK. Otherwise, what would they do? Just get you drunk or just give you something to bite on?

Oh no. No. Getting drunk was a very bad idea. Because alcohol thins the blood so you were more likely to bleed to death if you were drunk. The idea that in Nelson's navy that they got you drunk on rum before they chopped your leg off... it could well be that they lost more patients because they got them drunk beforehand.

I mean, again, it's a balance. Again, you've got ot decide which ... being drunk is probably a happier way to be.

I suppose that's true. So, what would you do? Would you just bite down on something? Or just be held down?

They would have strapped you down.[Imagine with a small bed, any person who might hold down the patient. They couldn't spare the people40:14]

So it was about being brave really, and just suffering.

And you could die of shock.

Not nice times to live in. And what was the link between astrology and medicine. You read a lot about them looking at charts and that. How is there a link astrology and medicine?

Astrology was one of the things that a university trained doctor would study. And it was doctors who thought that the planets and the stars affected every moment of your life. It was God's way of regulating your life because he was in charge of the stars and sacraments. So, it was a good idea. Any noble child would usually have their natal chart drawn up for future reference. It was a way of telling your future. Whether that child was going to live longer or when to expect it. That's of course only for the nobles. The common or garden Joe Bloggs might not know when his birthday is. Never mind what time of day in which it is likely for the future. And, of course, the stars told the future. [If you were ill] it would tell the doctor if you were going to recover or not.

So, if you didn't know when you were born, you could tell the doctor "oh, well I first got sick about six o'clock Monday evening" - he could draw up your [photo/chart?] of your ailments and then could then date it.

Ah, OK. That sounds obvious.

Because it gave the patient time to visit a priest and []. It also meant that the physician wouldn't have to embark on... because his patient goes and dies. Because ... he might even be sued for malpractice.

But, supposing your symptoms are very vague, so you couldn't really say exactly what the start is, there are things called the "spheres of Pythagoras". Pythagoras has invented them. And this is a kind of letter and number code that each letter of the alphabet has a number and you took the patient's name and added up the letters of his name and if it came out as an even number it meant he would recover. And if it was an odd number, he wouldn't. So, they could adjust it by taking just his Christian name, his surname, or both or the name of the day and sometimes even the name of the messenger who was sent to fetch the doctor.

How interesting.

All those things could be made into a [] and of course the doctor was very interested [44:37] so that it can't reflect on him. You could also use [them] on other things, for instance you're going to get married, you might go and consult a physician about your [horoscope], yours, your bride to be's horoscope to find out the best date to get married.

Yes, Yes

[45:10]

How interesting. We don't really do anything like that these days. Well, no, people read their horoscopes. I suppose people do read their horoscopes. What I find interesting is though, growing up in a church, being heavily involved in a church, was that horoscopes were really frowned on. They were seen as superstition and that you shouldn't be trusting the stars for your destiniy. It is God that is in control, so I find it interesting, how things have changed in that respect because obviously astrology and religion and medicine and everything were all very much linked in Tudor times and medieval times. It's really changed.

Yes. You might check the stars to see when you were going to get blood let or anything in the futue like cupping or anything else because each part of the body was ruled by different signs of the zodiac.

Oh, ok?

So, it went through the year, Aries was the first one and Pisces was the last one so that was the end, and everything else fits in between. And if your sign of the zodiac is in the wrong part of the sky and the moon was in a particular quarter it may or may not be a good time for blood letting and there is actually a tale where a man sawed his thumb off with a saw and he was

going to lose it. He went in search of an answer, but the surgeon said that we really shouldn't do it today because the stars are wrong. And he said "oh please sew it back" and the surgeon did. But the man never recovers it. He needs it as he's a carpenter and so he sued the surgeon for having done this for him, and sewing it back on a day when the stars said no. But the surgeon won the case because he'd actually consulted the stars on the day. [48:02]

How interesting. That's amazing. And if, medicine is a really fascinating subject. If members of the Tudor Society want to learn more about medicine, what sources are there? What books or primary sources are there that you'd recommend?

Well, there's lots of primary sources which are now imprints, there's some wonderful stuff out there. The leech book is good, so that's got lots of good stuff. There are also some cookery books.

Yes, I enjoy looking at those.

And I've covered things in my book "Medieval Medicine" which ...

Highly recomended as well. Yes. And, of course, your course, Everyday life of medieval folk has got.. I think it was my favourite unit, the one on the apothecary. I just found that fascinating. It's just a really good one. So your course is well worth doing as well. So, I think time is up. Thanks you for joining. Just let me ask you a quick question about your "Colour of" books, because you've obviously used this knowledge in your writing of your fictional novels, so just give us a quick rundown of how you've put those two things together. Your research into those areas of health and medicine and stuff, into your novels.

Well, the colour of poison obviously uses the fact that some pigments are lethal. I have an apothacary in that book who sells over-the-counter saff, which again, very conveniently, God used to label like pages of a book. I have oil of violets which is used as treatment of bruises. Well, God lablelled them by making them purple. But there obviously good for bruises. That's what they believed. The [50:56] believed that God labelled plants by giving them yellow flowers because they helped with [] so there's that []

And whay is the next book, can you tell us just a little bit about the next book.

It's the colour of gold. I'm sticking with the "Colour of ". [51:54]

Well, thank you ever so much for your time. It's been a fascinating talk, amazing. I love talking about medicine. I just find it a fascinating subject, especially as we have come full circle and are going back to these old remedies and that, so, thank you very much Toni. It's been lovely chatting to you.