INTERVIEW

# In the heat of the moment

Jon Sutton interviews **Andrea Burri**, psychologist and genetic epidemiologist

**Your main areas of interest are the genetics of sexual orientation and female dysfunction. Is that an easy field to work in?**

I think the major advantage I have from working in this specific research field is that there is still so much to be explored, as not many institutions worldwide are doing it. That gives me a lot of freedom and room to spread my scientific creativity. But of course the combination of two stigmatised research areas, and in the case of sexual medicine also tabooed, is quite a challenge. People's understanding – even sometimes sex researchers' – of behavioural genetics and its potential benefits can be quite prejudiced. Similarly, sex research isn't very well received within other scientific communities and often seen as less important or relevant. So I do sometimes feel double the burden.

**What are the implications of taking a genetic approach to female sexual dysfunction, in terms of 'treatment'?**

There are the obvious advantages. Knowing for example which biological compounds and pathways are involved in sexual function and dysfunction can help the development of drugs and medication to treat such problems. On the other hand, knowing that environmental and contextual factors play such a crucial role in the pathogenesis of FSD has implications for psychotherapeutic approaches – specific disbalances such as relationship problems can be targeted directly and emphasised in the treatment process. But of course medical prevention is the ultimate goal and always better than post hoc treatment. One thing researchers often mention is 'individually tailored treatment or prevention'. I do believe that this is the ultimate goal, but I am not sure how feasible it is for now.

**So you do leave the door open to a large element of relationship dysfunction in female sexual dysfunction. Do you ever find it hard to marry the two perspectives?**

Not at all. As a matter of fact our genetic epidemiologic studies have found that sexual problems are only very moderately heritable, meaning that environmental/contextual factors seem to be more important in the development and maintenance of FSD. In a recent study we used FSD-discordant identical twins and found that relationship dissatisfaction seems to be one of the most important risk factors for sexual problems – a finding that isn't surprising. However, I don't agree with many experts trying to label sexual problems as either a medical or a psychological problem in which contextual factors are not regarded as important. Although from my point of view FSD has an underlying multifactorial aetiology, I am convinced that there are biophysiological factors that contribute to the inter-individual variation of sexual function, whereas in my opinion contextual/psychological factors have more to do with intra-individual changes, i.e. phasic changes that occur within an individual.

**My reading of some of your research is that emotional intelligence and control are vital in sexual relationships.**

That was a finding from a study we conducted two years ago where we explored whether more emotionally intelligent women also report more frequent orgasms – they did. However, the results have never been replicated or been extended to other dimensions of sexual functioning such as desire, arousal and satisfaction. Nevertheless, we do believe that it is beneficial for women to express their feelings, emotions, expectations, but also to be able to read the partner's emotions. This doesn't necessarily mean verbal communication it can also be due to actions and behaviour: expressing what you want and like will help you feeling more comfortable with your own sexuality.

**Do you think the media portrayal of sex is a direct cause of sexual dysfunction?**

I think media portrayal and propaganda of what 'normal sex' constitutes, for example in terms of frequency, preferences, etc., definitely has effects on people's perceptions of and discontent with their own sexuality/sexual function that can eventually lead to the development of sexual distress – which is regarded as one of the primary diagnostic criteria for the diagnosis of a sexual dysfunction. Propagating what 'normal levels' of sexual function is also leaves no space for inter-individual variation in functional levels. Take sexual desire, for example. We are talking about a quantitative trait, a dimension that goes from no desire at all (hypoactive) to a lot of desire (hyperactive). What we tend to do is to dichotomise this normal distribution by creating so called diagnostic thresholds and once you exceed it you fall into the disease category. By conveying messages about 'normal desire levels' this artificial dichotomisation is fostered, and most importantly the dichotomisation is not based on clinical evidence and relevance.

> "more emotionally intelligent women also report more orgasms"

**I suppose often a dysfunction in one party, say premature ejaculation, can lead to dysfunction in the other?**

Yes, of course. If the partner suffers from premature ejaculation this can – if untreated and ongoing over a longer period – create frustration in the other partner. Sexual desire levels or arousal might drop in reaction to this repeated dissatisfaction and disappointment, which eventually again can have an effect on the other partner, who might feel under pressure and/or underachieving for not being able to satisfy the woman. It is kind of a vicious circle and sometimes very difficult to find a way out of it.

reading


Burri, A, Cherkas, L, Spector T. (2009). The Genetics and Epidemiology of Female Sexual Dysfunction (FSD): A Review. *Journal of Sexual Medicine, 6(3)*, 646-57.

www.twinsuk.ac.uk – The biggest UK adult twin registry of 12,000 twins used to study the genetic and environmental aetiology of age related complex traits and diseases. Based at the Department of Twin Research and Genetic Epidemiology at King's College London.

**Your research has concluded that the G-spot as a well-located, well-defined area is a myth. How was that finding received?**

I need to clarify here that we didn't say that it is a myth but that our preliminary results suggest that the G-spot might not be a real anatomical entity, a finding which of course needs to be replicated.

We used a classic twin model which gives you an impression on how much a trait is influenced by either genes or environment (e.g. experiences, etc.). Our hypothesis was that if the G-spot really exists and represents a well-defined anatomic area in the genitalia, then it must be heritable, because every anatomical trait so far investigated has shown to be heritable, hence to have a genetic base. But we didn't find any heritability for the G-spot. So we concluded that either it doesn't exist (anatomically) or it is a perception created by non-physiological factors that can cause a heightened sexual sensation.

FRANZISKA SCHEIDEGGER

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**Tell me about your work with gender nonconformity.**

Basically what I am interested in are evolutionary based theories of sexual orientation and its psychological correlates. Sexual orientation comes as a package of traits. One of these is childhood gender typicality, which are sex-typed behaviours, activities and interests that are atypical for biological and gender identity.

In one particular study we were interested in whether genetic factors influence sexual orientation and its two covariates – gender childhood typicality and adult gender identity. We were able to demonstrate that there are overlapping mechanisms/genes that are responsible for variation in all these traits/sexual orientations.

**You've also studied 'irritability and motiveless crying after female orgasm'. Can you explain what your approach brought to that?**

It was clinical and empirical observations. I had a few friends but also clients who told me about their emotional but also behavioural and physiological reactions after experiencing orgasm. In one specific case a woman suffering from postcoital episodes of crying and mood swings also reported having been sexually abused as a child. I checked the literature but couldn't find much information on this phenomenon, so I decided to investigate it a little further. I was particularly interested in finding out whether there is some relationship between previous experiences of abuse and postcoital psychological symptoms and how frequent this is in general population.

**And you combine a consideration of previous experiences with your genetic approach, in terms of epigenetics? What areas are you interested in looking at in this way?'**

Evidence from a number of epidemiologic studies highlight the crucial involvement of environmental (e.g. contextual, interpersonal) factors in susceptibility and development of sexual problems. In this regard I am particularly interested in the exploration of DNA epigenetic patterns that regulate gene expression profiles which could provide the missing link between gene expression, sexual impairment and the effect of say relationship distress or dissatisfaction. As such, genome-wide DNA methylation variation may provide quantifiable measures of environmental stress or heritable predisposition to FSD, as mediated by relationship dissatisfaction and quality and thus will offer a biological framework for the psychological/contextual cause underlying FSD.

**Online, I've seen you described as a 'supercool sexologist', 'man's best friend', and an 'owner of formidable heels'. Do you feel typecast or pressured as an 'attractive young woman' working in this field?**

Oh really? I am surprised because what I read was more along the lines of 'frigid, men-hating feminist'! No, I don't feel typecast or pressured – or I should say not any more. Now that the first wrinkles are appearing – they correlate of course with the years of working expertise in this field – I am taken more seriously than I used to be. As for the rest, I believe attractiveness is very relative.

## Interviewees?

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