



Inclusion, prevalence and attitudes towards gender diversity across Intersex variations

By Chris Breen

Affiliations



UNIVERSITY OF
LINCOLN



European
Reference
Network



Endo-ERN



Society for
Endocrinology

What do we mean by Sex ?



-
- Chromosomal Sex
 - Gonadal Sex (after 6 Weeks / Female Default)
 - Internal reproductive system
 - External reproductive system
 - Pubertal Sex Changes
 - Brain Sex
 - Behavioral and “Cognitive” Sex

(Dr Kirsten McKenzie)



What does 'intersex' mean? DSD / VSC

Intersex people are born with sex characteristics (including genitals, gonads, hormone levels and chromosome patterns) that do not fit typical binary notions of male or female bodies.

(Adapted from UN Definition)

Intersex Variations (over 50)

- **Partial androgen insensitivity syndrome (PAIS) 1:100,000**
- **Complete androgen insensitivity syndrome (CAIS) 1:20,000**
- **Congenital Adrenal Hyperplasia 1:13,000**
- **Turners Syndrome (45 X0) 1:2,000**
- **Klinefelter Syndrome (47 XXY) 1:600**
- **Hypospadias 1:200 – 1:2000**

A worrying development



LGBTQI+ Inclusion



- **People with VSCs Embracing the term Intersex or NOT**
- Similar spectrum of Gender identities and Sexual Orientation as wider population
- **Reason for Inclusion in LGBTQI+**
- Mutual support of another marginalised group in society
- **Some Polarised Views**
- Some have strong affiliation with gender assigned at birth coupled with internalised homophobia and transphobia

Gender Dysphoria – DSD Life study

Kreukels et al (2018)

		Turner F+	CAH F	XY DSD XX-GD	XY DSD F pa	XY DSD M	XXY	
No		325	221	107	63	87	219	
UGDS, Mean (SD)		14.53	15.05	12.69	14.50	10.65	11.90	
UGDS Range		10-37	10-50	10-24	10-31	10-20	10-32	
		Control Women	Control Men	AFAB with GD	AMAB with GD			
No		195	153	157	281			
UGDS, Mean (SD)		15.44	12.32	46.74	42.19			
UGDS Range		10-32	10-36	27-50	18-50			

Gender identity disorder

Babu and Shah, (2021)

	DSD-Subtype	No	Gender Identity disorder	GID %	
XX DSD	CAH-F	460	18	4%	
	CAH-M	48	7	15%	
XY DSD	CAIS-F	238	4	2%	
	PAIS-F	113	14	12%	
	PAIS-M	28	7	25%	
	5ARD-F	179	96	54%	
	5ARD-M	9	0	0%	
	17HSD-F	45	24	53%	
Sex Chrom DSD	MGD/GD-F	36	8	22%	Totals
	MGD/GD-M	11	0	0%	1167 / 178 / 15%

Further research needed – Methodology

Limitations of Current Research

Sample Selection

Preconceptions of investigators

Stigma and Secrecy

Three Streams of Further research

Existing Literature review – wider scope

Questionnaire to PSG using 18 pt UGDS-GS

Biobank and NHS Databases

- *“a man is a man and a woman is a woman, it is just common sense”*

- *STICK TO POLITICS*



References and Further Study

Babu and Shah (2021) Gender identity disorder (GID) in adolescents and adults with differences of sex development (DSD): A systematic review and meta-analysis

<https://interactadvocates.org/wp-content/uploads/2022/10/Intersex-Variations-Glossary.pdf>

Klinefelter's Syndrome Association - <https://www.ksa-uk.net>

Kreukels (2018) Gender Dysphoria and Gender Change in Disorders of Sex Development/Intersex Conditions: Results From the dsd-LIFE Study

<https://listverse.com/2018/10/03/10-societies-that-recognize-more-than-two-genders/>

McGuire et al (2020) Utrecht Gender Dysphoria Scale - Gender Spectrum (UGDS-GS): Construct validity among transgender, nonbinary, and LGBTQ samples <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7430422/>

McKenzie, Kirsten (2023) – Lecture – Sexual Differentiation of the Nervous System

Turners Syndrome Support Society - <https://tss.org.uk/>

UN Intersex Fact Sheet <https://www.unfe.org/wp-content/uploads/2018/10/Intersex-English.pdf>



Thank you

Chris Breen

Senior Lecturer / Programme Lead

School of Health and Social Care

Trustee Klinefelter's Syndrome
Association

Member Society of Endocrinology

Chbreen@lincoln.ac.uk