Description of drugs prescribed for hormone therapy in specialized health services for transsexual and transvestite persons in Rio Grande do Sul, Brazil, 2020

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ABSTRACT

Objective: To describe the drugs prescribed for hormone treatment as part of the transsexualization process in health facilities providing specialized care for transsexual and transvestite persons in the state of Rio Grande do Sul, Brazil. **Methods:** This was a descriptive study based on data collected in health facilities between May and September 2020 using the instrument developed by the researchers. **Results:** The survey covered all seven services in the state. Antiandrogen drugs and spironolactone were prescribed for transsexuals and transvestites women in all services. Only one service did not prescribe cyproterone. All health facilities prescribed estrogenbased drugs, although with differences in the route of administration. In the case of transsexuals men, all services prescribed androgens to be administered via the intramuscular route. **Conclusion:** The study indicates which drugs are prescribed and their diversity, ratifying the need to produce information for the implementation of equity policies in the Brazilian National Health System.

Keywords: Transgender Persons; Sexual and Gender Minorities; Hormone Replacement Therapy; Epidemiology, Descriptive.



INTRODUCTION

Despite gaps in the data, estimates indicate that transsexual and transvestite persons account for 0.69% of the general population in Brazil.1 Within the Brazilian National Health System (SUS), the so-called transsexualization process, guaranteed by law since 2008, together with the guidelines of the National Policy for Lesbian, Gay, Bisexual, Transvestite and Transsexual (LGBT) Comprehensive Health, are indispensable.² The Ministry of Health has expanded the process, with guidelines for comprehensive care, multidisciplinarity and interdisciplinarity, and has highlighted the need for its integration with Primary Care.3 Those wishing to undergo the procedures must be at least 18 years old and no more than 75 years old. Follow-up is mandatory for at least two years before surgery, and for up to one year after surgery.4

Hormone treatment is described as the administration of exogenous endocrine agents to induce changes in the body,5 reduce levels of endogenous sex hormones and increase levels of hormones consistent with the person's gender identity.6 In Brazil it is indicated for people who have been diagnosed as having 'gender incongruence or being transgender'.7 The National List of Essential Medicines (Relação Nacional de Medicamentos Essenciais - RENAME), which contains the list of available medication, is a fundamental instrument in the SUS.8

Hormone treatment is another critical point in the process of care for transsexual and transvestite persons. Other critical points include scarce specialized health care facilities, misinformation, lack of care standardization, use of hormones and follow-up.9-11

In the Southern region of Brazil, Rio Grande do Sul is the state with the largest number of health facilities specialized in providing care for transsexual and transvestite persons. However, only one of them comprises a hospital capable of performing the transsexualization process.

Study contributions				
Main results	This study described the drugs prescribed for hormone treatment as part of the transsexualization process in seven specialized health care facilities for transsexual and transvestite persons in the state of Rio Grande do Sul, Brazil.			
Implications for services	The findings bring knowledge about the pharmacological care provided in the transsexualization process, reinforcing the need to improve it in terms of better therapeutic choices and promotion of access and care in health services.			
Perspectives	Production of information about the National Comprehensive LGBT Health Policy needs to be supported, increasing the involvement of sexual and gender minorities, in addition to the scientific community, in discussions about its implementation in the Brazilian National Health System (SUS).			

Considering the issues at hand, the objective of this study was to describe the drugs prescribed for hormone treatment as part of the transsexualization process in health facilities providing specialized care for transsexual and transvestite persons in the state of Rio Grande do Sul, Brazil.

METHODS

This was a descriptive study of SUS health facilities providing specialized care for transsexual and transvestite persons in the state of Rio Grande do Sul, between May and September 2020.

The sample comprised all the specialized outpatient and inpatient services informed by



the State Health Department. According to the Ministry of Health, qualification of a health service to provide the transsexualization process, with funding for procedures, requires fulfillment of a series of criteria and rules. At that time, in Rio Grande do Sul, only one hospital was qualified to carry out this process. The seven facilities were located in Porto Alegre (state capital), Canoas (metropolitan region), Santa Maria (central region), Passo Fundo (northern region), Pelotas and Rio Grande (southeastern region).

The State Health Department's LGBT Health Policies Division provided the researchers with a list of contacts at the services, enabling them to send emails to the respective people in charge to present the research objectives, provide explanations about data collection and a link to the questionnaire to be filled out.

The data were obtained using the standardized questionnaire prepared on the Google® platform. It was answered remotely without interference by the researchers between May and September 2020. The questions related to period of time in which the health facilities were operational. The State Health Department's LGBT Health Policies Division took part in reviewing the instrument and assessing data quality.

The instrument included questions organized into four dimensions: i) profile of service users; ii) profile of health professionals; iii) characteristics of health care; and iv) pharmacological characteristics of the hormone treatment provided. The variables presented in this research note were: length of time the facility had been in operation, in years or months; protocol or recommendation used as technical support by the service; number of people attended to, according to gender identity; number of people in regular consultations and information on service user follow-up time during hormone treatment (data reported by the respondents, indicating the approximate number of years); and name of the drugs prescribed by the health facility. The data were described according to absolute frequency.

The research project was submitted to the Human Research Ethics Committee of the Universidade Federal do Rio Grande do Sul and approved as per Certificate of Submission for Ethical Appraisal No. 82036018.6.0000.5347/2018.

RESULTS

There were no refusals to fill out the questionnaire. Table 1 presents the characteristics of the seven health facilities specialized in the care of transsexual and transvestite persons in the state of Rio Grande do Sul in 2020. They had been operating for between five months and 20 years. With regard to protocols or recommendations for medication prescription, five services followed those used in the United States,12 two followed those used in Canada,13 and one followed those used in Uruguay.14 Two services reported not using international protocols or recommendations for prescribing medication.

The monthly number of appointments of people self-identified as transsexual women ranged from three to 52. In the case of transvestite persons, the number ranged between zero and ten; for transsexual men it ranged between three and 69; and for nonbinary persons it ranged between zero and nine (Table 2). The number of people regularly followed-up in health facilities ranged from one to 130. The health facility that had been in operation for the longest period of time provided follow-up to service users during hormone treatment for between three and four years. Two health facilities reported that followup occurred while the necessary treatment was being carried out, while three reported followup of one to two years.

The medication prescribed for transsexual women and transvestite persons is listed in Table 3. Antiandrogen drugs and spironolactone were prescribed in all services. All the health facilities except one prescribed cyproterone:



Table 1 - Characteristics of health facilities specialized in care for transsexual and transvestite persons, Rio Grande do Sul, 2020

Health facility and city	Length of time facility has been operating	Protocol or recommendation	
Hospital			
Porto Alegre	20 years	United States ¹²	
Santa Maria	5 months	_ a	
Outpatient clinic			
Porto Alegre	1 year	United States, ¹² Canada ¹³ and Uruguay ¹⁴	
Canoas	3 years	United States ¹² e Canada ¹³	
Rio Grande	2 years	_ a	
Pelotas	2 years	United States ¹²	
Passo Fundo	5 years	United States ¹²	

a) Facilities informed that they do not use international protocols or recommendations for prescribing hormone therapy drugs.

Table 2 - Absolute frequencies of transsexual women, transvestite persons, transsexual men and non-binary persons attending health facilities specialized in care for transsexual and transvestite persons, Rio Grande do Sul, 2020

Health facility and city	Transsexual women seen per month	Transvestites seen per month	Transsexual men seen per month	Non-binary persons seen per month	People who had regular appointments	Approximate length of time of service user follow-up
Hospital						
Porto Alegre	30	_	20	-	50	3-4 years
Santa Maria	6	2	3	-	1	Less than 1 year
Outpatient clini	С					
Porto Alegre	52	10	69	9	130	1-2 years
Canoas	10	-	25	3	50	1-2 years
Rio Grande	6	_	14	_	20	As long as necessary
Pelotas	3	_	3	1	20	As long as necessary
Passo Fundo	10	1	27	2	80	1 a 2 anos

Note: Gender categories were self-reported by those benefitted with treatment.

two prescribed cyproterone and ethinyl estradiol combination therapy; four prescribed a combination of cyproterone and finasteride; and one prescribed cyproterone and dutasteride. All health facilities prescribed estrogen-based medication, although using different routes of administration: six proscribed oral use of estradiol estradiol valerate; five prescribed transdermal use of estrogen; three prescribed estradiol gel and estradiol hemihydrate gel; and three prescribed estradiol hemihydrate

adhesive transdermal patches. One health facility prescribed combined oral intake of estradiol and progesterone; two prescribed a combination of estradiol and injected norethindrone; one prescribed a combination of medroxyprogesterone and estradiol; and one prescribed a combination of estradiol enanthate and algestone acetophenide. The remaining services did not prescribe injected estrogen and progesterone combination therapy (Table 3).



Table 3 - Absolute frequency of drugs prescribed for service users seen at health facilities specialized in care for transsexual and transvestite persons, Rio Grande do Sul, 2020

Service users	Class of drugs and route of administration	Drug	Absolute frequency
		Cyproterone	6
		Spironolactone	7
	Antiandrogens	Finasteride	4
	(oral route)	Dutasteride	1
		Cyproterone + ethinyl estradiol	2
		Does not prescribe	_
	Estus visions	Estradiol	6
	Estrogens	Estradiol valerate	6
_	(oral route)	Does not prescribe	-
Transsexual women and		Estradiol gel	2
transvestite persons	Estrogens	Estradiol hemihydrate gel	3
	(transdermal route)	Estradiol hemihydrate adhesive patches	3
		Does not prescribe	2
	Estrogens + progesterones	Norethindrone + estradiol	1
	(oral route)	Does not prescribe	6
		Norethindrone + estradiol	2
	Estrogens + progesterones	Medroxyprogesterone + estradiol	1
	(intramuscular route)	Algestone acetophenide + estradiol enanthate	1
		Does not prescribe	3
Transsexual men		Testosterone cypionate	7
	Androgens	Testosterone undecylenate	5
	(intramuscular route)	Mixed testosterone esters	4
	Androgens	Testosterone gel	5
	(transdermal route)	Does not prescribe	2

All seven health facilities reported prescribing medication for transsexual men (Table 3), namely intramuscular or transdermal androgen administration. In the case of intramuscular administration, seven prescribed testosterone cypionate; five prescribed testosterone undecylenate; while four prescribed mixed testosterone esters. Transdermal testosterone gel was prescribed by five health facilities.

DISCUSSION

The findings point to a number albeit limited of transsexual and transvestite persons receiving care, and a diversity of medications prescribed for hormone treatment in the seven specialized services available in the state of Rio Grande do Sul. The results presented are preliminary, derived from multidimensional research developed in the context of equity policies that, although recent in the SUS, must be evaluated and ensured as inalienable guarantees of users of the public health system.^{15,16}

Use of hormones is part of this scenario, as a biomedical technology for making changes to the body which, when desired by transsexual and transvestite persons and performed safely, is important for the quality of life of those who are benefited by it.^{17,18} Notwithstanding, this study revealed a low number of people receiving care, which is in line with other



studies¹⁹⁻²¹ which portray a common panorama for transsexual and transvestite persons in the SUS: persistence of obstacles to access and long waiting times for care. Expansion of services and opportunities for hormone treatment are therefore recommended, so as to contribute to comprehensive care and leave behind the gender identity disorder viewpoint.²²⁻²⁵

Prescription of different kinds of drugs, as well as health facilities reporting use of several international protocols, indicates the need to expand production of information on the subject in the SUS. Considering that current legislation submits part of these drugs to special control,26 as is the case of testosterone, the State should enable the best therapeutic choice for all health service users so as to avoid self-medication. Use of hormones without a medical prescription, or hormones obtained illegally, besides the risks and costs imposed on the SUS, affects the daily life of transsexual, transvestite, intersex and non-binary people, and increases their vulnerability.^{27,28} Uruguay,¹² Argentina²⁹ and Germany³⁰ report successful experiences in their health systems in this respect, adopting protocols for hormone therapy, guides for health professionals produced by those countries' respective Health Ministries, as well as active participation of those who are benefited by the transsexualization process.

Even though this study involved all the health services specialized in providing care to transsexual and transvestite persons in Rio Grande do Sul, nevertheless there are limitations to be considered. They relate to respondent memory bias, the different record keeping methods used by the services and remote data collection. However, the researchers did adopt procedures for reviewing and assessing the quality of the data collected.

In conclusion, the National Comprehensive LGBT Health Policy needs to be implemented in an articulated manner, in the different levels of health care services and in Brazil's Federative Units. We also reiterate the need for interaction between the different areas of pharmacological care and incorporation of technology by the SUS.

Hormone therapy is a right and should be seen as urgent. The SUS is under an obligation to make progress with producing scientific evidence on hormone therapy drugs, their efficacy and safety, as well providing the best therapeutic choices for transsexual, transvestite and non-binary persons.

AUTHORS' CONTRIBUTION

Augusto RM and De Oliveira DC took part in the concept and design of the study and data collection. Augusto RM, De Oliveira DC and Polidoro M contributed to data analysis and interpretation, drafting and critically reviewing the contents of the manuscript. All the authors have approved the final version of the manuscript and are responsible for all aspects thereof, including the guarantee of its accuracy and integrity.

CONFLICTS OF INTEREST

The authors declared that they have no conflicts of interest.

ASSOCIATED ACADEMIC WORK

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