

Hormone Consumption Pattern In Hijra Community In India

Neha Naik* & Bal Rakshase**

Abstract

Introduction: The Hijra community in India is well known throughout the country, with different names across the different regions. The Hijra community undergoes a lot of turmoil for their existence. The lack of doctors performing gender reassignment surgeries or therapies is a worldwide phenomenon, which eventually pushes the transgender towards self-prescription of hormones. In Hijra community the non-prescribed hormone users are at high risk of health problems resulting from improper dosing and a lack of monitoring. One of the major reasons for self-prescription is non availability of health care system like gender transition clinics or support system in India. **Methodology:** a descriptive cross sectional research design was implemented to achieve the framed objectives. Quantitative approach was used to gather information regarding their general demographic profile, extent of hormone use within the community, to ascertain their knowledge attitude and practices associated with use of hormones. **Results:** 84.4% of the respondents reported that they knew about feminization procedures, 10% said no and 3.7% said they did not know. The respondents were asked if they know hormones can bring about any physical change to which 95.6% reported yes and 04% said no. The 58 respondents who are either consuming hormones now or had a history of hormone consumption, 37.8% of them take hormones in form of injections, 13.3% in form of injections and OCP, 7.8% in form of injections and tablets, 2.2% in form of tablets, 1.1% in form of OCP, 1.1% in form of creams and the last 1.1% in form of cream and tablets. **Conclusion:** The community is completely relying on informal networks such as quacks and dealers in fulfilling their needs for feminization and aiding these procedures, which not only puts their life at stake for developing chronic irreversible conditions but also can lead to death.

Key Words: Hijra Community, transgender, feminization, hormone consumption

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Introduction

The Hijra community in India is well known throughout the country, with different names across the different regions. The community is treated with respect in a few places whereas they are disregarded at many places. The community is a closed group and remains in their own ghettos, preferring not to mix with other communities.

Hijra's or the "third gender" as they are known represent the sexual minority group of India. Pronounced as "Hijra", "Hijda", "Hijarah" in Urdu and Hindi are the most common names used to address the individuals from this community (Chettiar 2015), the mythological name for them is "Kinnar" (Chettiar 2015, G. Kalra 2012, Nanda 1986) and these terminologies are further explained in the chapter. The Hijra community characterize themselves by dressing in women attire, clapping hands and expressing in female gestures (Nanda 1986, Chettiar 2015). Across the country they are found traditionally

harbingers of good luck to the people. They form an ancient social group that has been recognized for roughly 4000 years and depicted in literature and sculpture (Gupta & Sivakami 2016). The Hijra culture or group's existence dates back to period even before the term transgender was coined by the west (Chettiar 2015).

The term transgender/TG was coined in the year 1971, and has been rampantly used over the last ten years as people have started understanding and recognizing the term (Whittle, 2010). Across the globe the term transgender is used to describe people who do not identify themselves with the binary classification of gender assigned to them at birth. They defy the 'norms' of the socio cultural, legal and medical sex to which they were born (Stroumsa, 2014). The term gender minority was introduced in 2011 and is inclusively used as an umbrella term which includes people who identify as TG or have other genders having diverse sexual orientation, identities, attraction and behaviour (Reisner et al.,

2016). The TG represent a diverse population across the regions, within the countries and worldwide. Global estimates show that 0.3 to 0.5% people identify themselves as Transgender (Stroumsa, 2014). The number even though represents a small percentage of the population, is often burdened with enumerable health disorders across the globes. The definitions and terminologies defining transgender vary according to local customs, national factors and global scenarios. The community is always at the behest of social, economic and political discrimination. Stigmatisation and marginalization has inundated the growth of the community to seek education and occupation which are more often not of their choice. There are no systems in place where the health care facilities are able to take care of all their needs.

The TG community accounts to 4.9 lakh of India's population as per the 2011 census (Census2011). This was the first time the community was included in census, however the numbers still seem to be under reported. The transgender population in India comprises of various identities based on regional and cultural differences, these include Hijra's, Aravanis, Kothis, Jogatas/Jogappas and Shiv-Shaktis. The Hijra population is one of the most visible populations in India but at the same time one of the most vulnerable minority. The traditional fanfare that has been associated with them pushes the community towards the periphery of development. Right from having no civil rights to being denied the most basic human rights has deteriorated and depressed the community over the time. The community thrives on occupations like seeking alms, commercial sex work and dancing which has led to further discrimination against them in the society.

One of the major hindrances which were faced earlier was lack of legal recognition as a community, which however has changed since the historical judgement of April 2014 by the Supreme Court. The NALSA vs. Supreme Court finally resulted in recognition of the third gender official, thus opening up multiple opportunities and giving them the long needed civil rights of the citizen of this nation. However the sec 377 IPC still looms over the community with the fear of criminalization, which portrays how they

community has been pushed to thrive on mercy of the society. Lacks of fundamental rights are leading the community nowhere.

The Hijra Community of India

The Hijra community in India is well known throughout the country, with different names across the different regions. The community is treated with respect in a few places whereas they are disregarded at many places. The community is a closed group and remains in their own ghettos, preferring not to mix with other communities. They have their own traditions and cultures. The term "Hijra" in Urdu language means "the impotent one" similarly a Nepali lexicon noted that word Hijra is derived from Persian hiz, which meant catamite, ineffective and incompetent (Lal 1999, Basu 2001, Mukherjee 2004, Chettiar 2015). In the Indian society it is used for and by the people who identify themselves as "neither man nor woman", Kinnar (Sanskrit) or the third gender (Nanda 1986, Mukherjee 2004, G.Kalra 2012). They are also known as eunuchs, transevites, hermaphrodites, androgynies, transsexuals and gyneimimetis while also being referred to as intersex, emasculated, impotent, transgendered, castrated, effeminate or sexually anomalous or dysfunctional in Indian society (Lal 1999). The Hijras are born biological male or intersex and join the Hijra community at some point in their life.

The UNDP national consultation on Transgender/Hijra drafted a common definition for Hijra in 2011, defining them as "individuals (male-born) who voluntarily seek initiation into Hijra community, whose traditional profession is badhai but due to prevailing socio-economic and cultural conditions, as significant proportion of them are into begging and sex work for survival. These individuals live in accordance to the community norms, customs and rituals which may vary from region to region in India." (Chakrapani, 2010). The community is identified as Hijra/Kinnar in Northern India, Jogta/Jogappa/Hijra/kothi in Maharashtra and Karnataka, Thirunanga/aravani in Tamil Nadu, Shiv- Shakti /Hijra in Andhra Pradesh, and Transgender in North east India (Chakrapani, 2010,2014). The Hijra are a part of the Indian cultural and traditional history from the time immemorial. The community finds its name

mentioned in traditional text of the ancient century and also in the various art forms since the ancient eras. Kama sutra writings have described the sexual life of the people with third nature (Tritya Prakruti) (Chakrapani, 2010, 2014). The Hijra community also finds its recognition in Hindu mythology of Mahabharata and Ramayana (Nanda 1986, Krishna and Gupta 2002). Ardhnarishwara, the image of Lord Shiva and Parvati together in one body is seen in various sculptures (Krishna & Gupta 2002, Kalra et al., 2010) is a figurine representation of half male and half female.

Transition or feminization

Transition is defined as the gender transition from male to female. This transition is also known as attaining 'Nirvana'. The traditional method of nirvani is where the male sexual organ, his penis and testis are cut off under traditional rituals so as to attain nirvana and formally become a part of the Hijra community. In the earlier days, the practice of nirvana was done with the help of diamma or thaimma who used to conduct the process of castration (Nanda 1986, G.Kalra 2012). These processes differ from place to place. In gharanas which predominantly follows the Islamic culture, one has to first accept Islam to undergo circumcision and then opt for nirvana as stated during one interview. Whereas, in Pune Goddess Yellema is worshipped, and it is said that she appears in dreams of the person who has to undergo the process of castration. It takes forty days to complete all the rituals. After these rituals, thaimma severs the penis and testis followed by pouring of hot oil and water for forty days till it heals. What one fails to understand is these practices are followed under unhygienic conditions and can lead to various urinary and reproductive tract infections and also death. However they now use modern methods as they say, but these are not done in proper clinics or under anaesthesia but in small dingy clinics on the outskirts as Sex reassignment Surgery (SRS) is not available to many in India due to economical expenditure associated with it. The transition process forms an integral part of the community as they face discrimination based on it. The transition process not only helps with inclusion in the community, but it is also believed that the traditional methods help them become more

beautiful (Humsafar 2012). The constant desire to look like women leads them to indiscriminate use of medicine or other beautifying surgeries or practices. Moving away from the traditional and individual needs, there is a rampant increase in use of hormones because of professional requirements. Most of the TG/Hijra's are involved in Commercial Sex work or in dancing; these profession require well defined assets and body figure. To attain well shaped breast and hips, hormones are consumed influenced by their female counterparts in sex work or the number of advertisement which promote such practices in women.

The economic impact of high end cost of SRS along with no guidelines or policy for the same and the fear of losing lives leads them to alternative methods of transitions, like breast augmentation, and hormonal therapy. As many cannot afford breast augmentation surgeries these individuals turn towards use of Hormones. The hormones have become an easy way out for people who cannot currently afford surgeries or breast implants. The need for physical change coupled with low cost involved in hormones, there is an increased use of hormones in the community. Since there are no guidelines for the same regarding prescription, not many doctors prescribe hormones to the TG/Hijra community, thus leading to an increased non prescribed use of hormones within the community.

This wide spread use of non-prescribed hormones is a global phenomenon and not just limited to India. The non-prescribed hormone users are at high risk of health problems resulting from improper dosing and a lack of monitoring. One of the major reasons for self-prescription is non availability of health care system like gender transition clinics or support system in India. The amount of stigma that is associated with TG/Hijra community is immense and renders them from coming out in open and seeking health care services or counselling. The community faces multiple barriers in seeking health care facilities and services. The insensitivity of the doctors and staff to being subject of ridicule of the other patients, the community avoids seeking help. The easy availability of hormonal pills in the chemist shops is another factor which leads to self-prescription and indiscriminate use of hormones

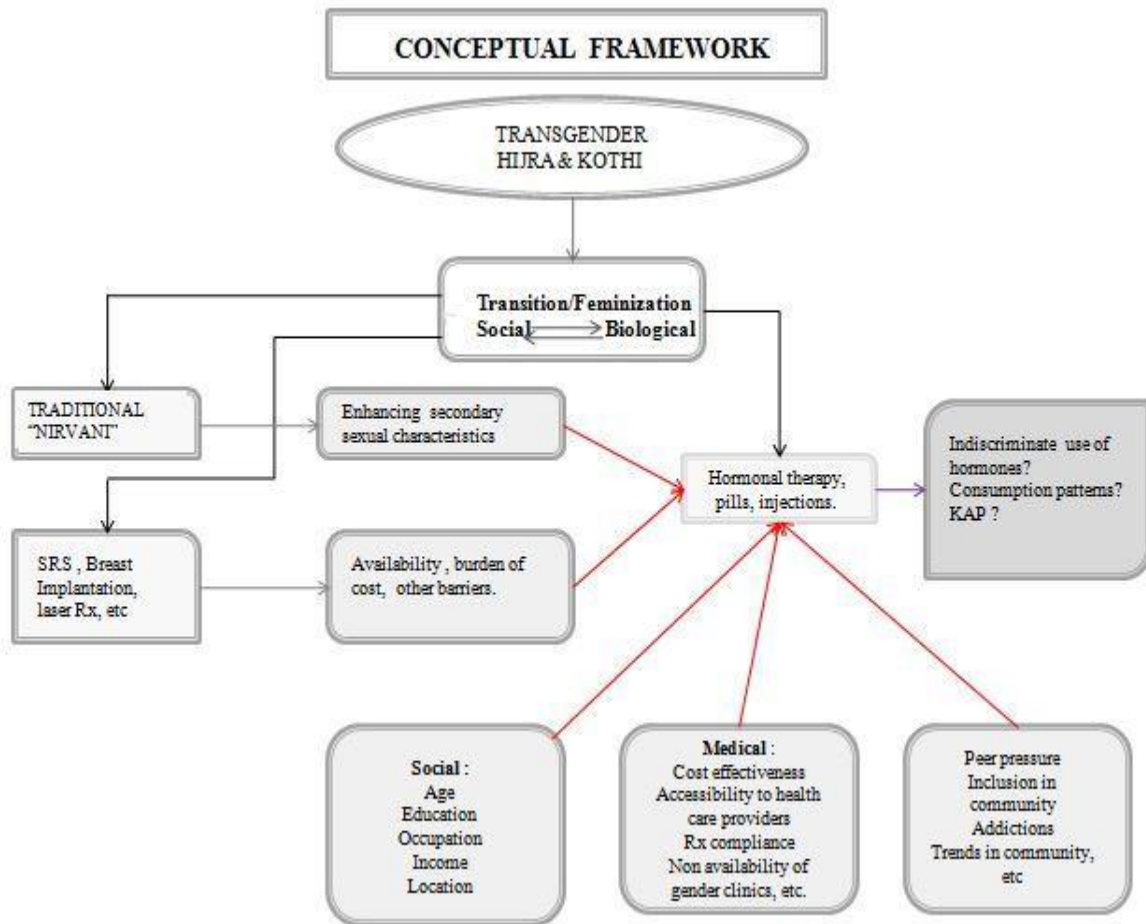
within the community. The Transgender bill 2014 talks about including Sex Reassignment Surgery in Government Hospitals at concise rates for the TG /Hijra community, however it does not mention when these services will be available. Adding on to it is the lack of detailed information on Hormone therapy and related counselling which forms an essential part of hormone therapy treatment.

Hormone therapy: Effects and Side effects

The aim of hormone therapy in TG/Hijra community is to minimize endogenous androgen levels, suppress masculine secondary sexual characteristics and use exogenous female sex steroids to achieve feminine characteristics (S.Kalra 2012).The human body produces

androgens which consist of testosterone, estrogens which consist of estradiol, estriol and estrone and progestagens which consist of progesterone. The levels at which these hormones are present in the body differs from individuals to individuals. A variety of medicines are available in the market to enhance secondary sexual characteristics and used by many. In the trans population these hormones give them a chance to enhance their desired secondary sexual characters which can match their identity (Ashbee & Goldberg, 2006). Most of the time people resort to hormonal pills either because the cost of sex reassignment surgery and the follow up treatment is too high or they do not want to undergo castration. This eventually leads to unsupervised use of hormonal pills.

Conceptual Framework



Research objectives

The literature review helped us understand the lack of research in domain of

transition processes and hormone use in transgender community. Owing to these lacunae in the researches, the study focuses on seeing the

extent, to which hormones are being consumed within the community, knowledge attitude and practice regarding hormones and its uses

Specific Objectives:

Objective 1- To understand the level of knowledge regarding use of Hormones within the community

Objective 2- To understand the attitude of the community members towards hormones

Objective 3- To comprehend the practices associated with consumption of hormones

Research Design:

For the process of carrying out the study and attaining answers to the objectives, a descriptive cross sectional research design was implemented. Quantitative approach was used to gather information regarding their general demographic profile, extent of hormone use within the community, to ascertain their knowledge attitude and practices associated with use of hormones. The study also focused on awareness of side effects, safety measures taken by the community and financial concerns associated with hormone use.

Universe of study and study respondents:

The cities of Mumbai and Pune in the state of Maharashtra were chosen as the universe of study with respondents who were members of the transgender community living in the city.

Study population:

Individual who identify themselves as transgender/Hijra, (who do not identify with the binary gender identification assigned at birth on basis of biological classification). Male to Female (M2F) transgender were selected from the age group of 15 to 45, generally known as the reproductive age group.

Development of instrument:

An interview schedule was prepared for the purpose of data collection from the community. The schedule was prepared in English and then translated to Hindi for convenience. The first draft of schedule was then discussed with a member of the community who works in an NGO and acted as the first point of contact in the beginning of the study. It consists six parts. The

first section covered age of the respondent, socio economic parameters like level of education, occupation, income, and living condition. The second section focuses on understanding their awareness about the feminization process both traditional and modern and if they undergo any of them, their views and reason for feminization. The third section focuses on assessing the reason for use of hormones, awareness about dose and frequency, pattern of consumption. The fourth section covers the experience associated with use of hormones followed by fifth which focuses on comorbidities and substance use. Sixth section encompasses affordability, accessibility and barriers face in accessing hormones. The concluding section aims at prioritizing the current needs of the community with respect to hormone therapy or any other transition process.

Sampling procedure:

The non-probability snow ball sampling was used to reach out to respondents. The first few respondents were identified with the help of TG outreach worker, who also helped in identifying NGO's working for the TG/Hijra community in Mumbai. In Mumbai, Astha Parivar, Sakhi Charchowgi Darpan and Triveni Samaj and in Pune Udaan trust helped in reaching out to the TG/Hijra population.

Collection of Data:

The data was collected through face to face interviews with all the participants who had agreed to be part of the study. A detailed explanation about the aim and motive of the study was first explained to the NGO's, the gurus and the participants. After the guru permitted for the interviews the interviews were taken.

Data Analysis:

The data was analysed with the help of Statistical Package for the Social Sciences (SPSS) software 22.0 version.

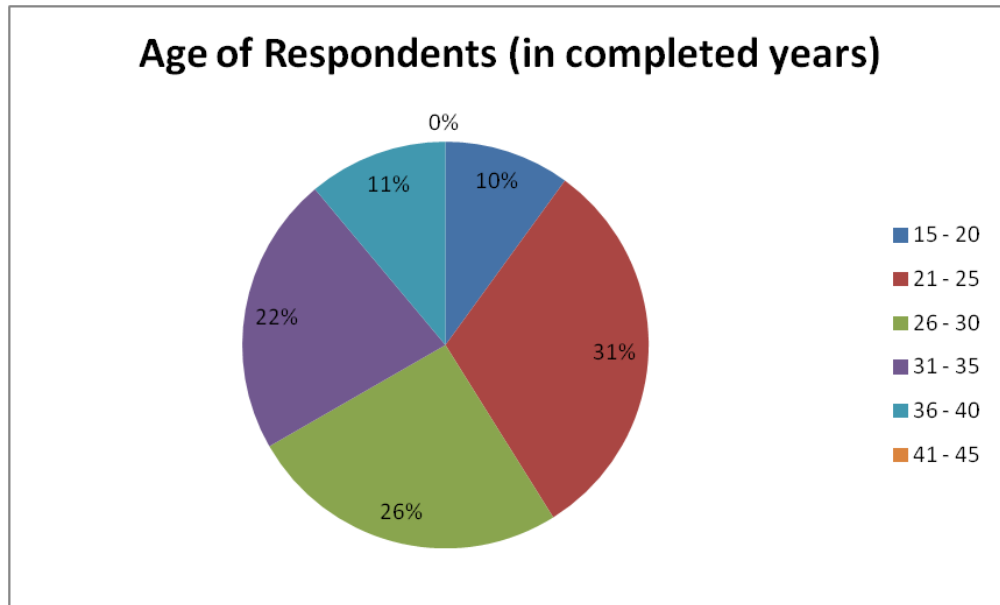
Results and Discussion:

Socio Demographic Profile

Age of the respondents

The following figure shows the age distribution of the sample (n=90)

Fig.1: Distribution of respondents as per the age groups

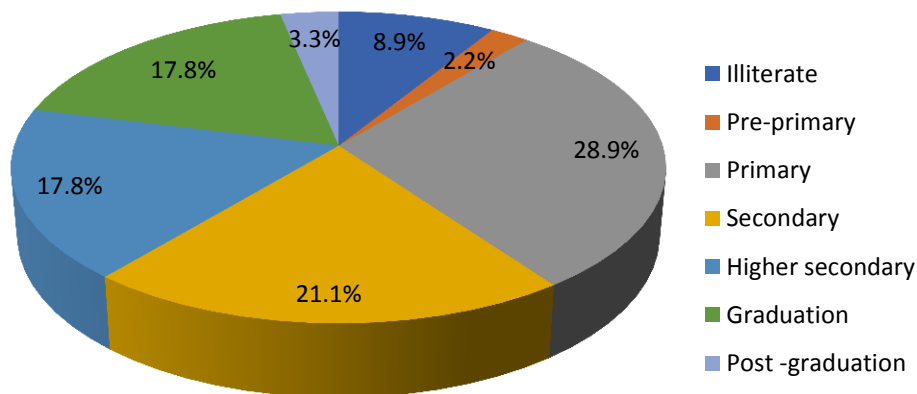


The respondents were taken from the age group of 15 to 45, of these 10 percent of the respondents were from the age group of 15 to 20, 31.1 percent from 21 to 25 years of age, 25.6 from

26 to 30 years of age, 22.2 percent from 31 to 35, 11.1 percent from 36 to 40 years of age group. The youngest participant was 16 years of and the oldest was of 38 years.

Fig 2: Distribution of the respondents as per their education

Level of Education

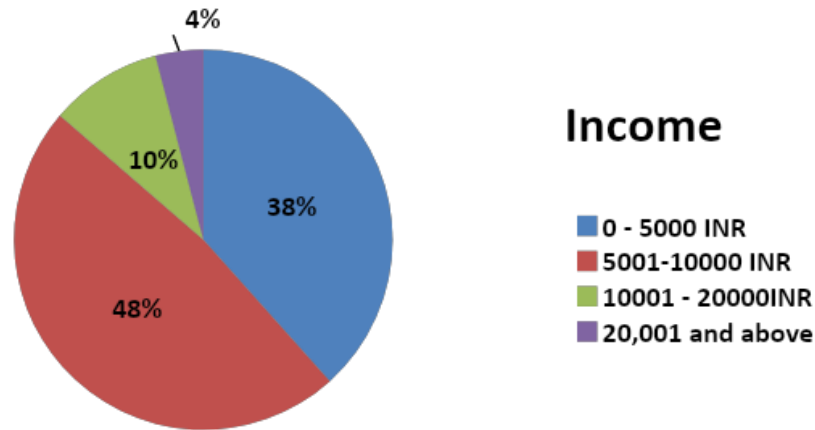


Among the 90 respondents who participated in the study, 8.9% were illiterate, 2.2 % had education up till pre-primary level, 28.9% primary level,

21.1% secondary, 17.8 higher secondary and graduation and 3.3% post-graduation.

Income :

Fig 3: Percentage distribution of respondents as per their income group



The respondents were grouped in an income range, of which 31.1 percent respondents belonged to the income group of INR 0- 5000, 38.9 percent belonged to the group of INR 5001-10,000, 7.8% of them belonged to the group of INR 10,001 – 20,000 and a very small percent of 3.3% belonged to the group of INR 20,001 and above.

Of all the 90 respondents, 6.7(6) percent reported having no monthly income, 18.9(17) percent did not specify their source of income.

The minimum earning of INR 2000 was reported by 5.6 (5) percent of the respondents and the maximum of INR 25,000 was reported by 3.3(3) percent of the respondents.

Knowledge regarding Feminization procedures and hormone use:

The following table gives us the information about the number of respondents who are aware about feminization procedures, that is procedures carried out to enhance feminine secondary sexual characteristics.

Table No 1: Knowledge about Feminization and various procedures

	Total	Percentage (%)
Awareness about feminization		
Yes	76	84.4
No	09	10.0
Don't know	03	03.3
Others	02	02.2
Awareness about procedures* (n=90)		
Traditional		71.1
Daimas	64	82.2
Nirvaani	74	55.6
Katori	50	
Modern Method		97.8
Emasculation	88	52.2
SRS	47	93.3
Breast augmentation	84	91.1
Hormone therapy	82	24.4
Clitroplasty	22	38.9
Penectomy	35	81.1
Laser treatment	73	28.9
Vaginoplasty	26	01.1
Others(Skin pigmentation)	01	

*Note: Includes multiple answers

To this 84.4% of the respondents reported that they knew about feminization procedures, 10% said no and 3.7% said they did not know.

The participants were then questioned if they were aware about traditional and modern methods of feminization. From which 71.1% said they knew about 'Daimass', 82.2% knew about 'Nirvani' and 55.6% knew about 'Katori' method, which are the three most common traditional methods of feminization.

Out of the 90 respondents, 97.8% reported that they knew about emasculation, 52.2% knew about SRS, 93.3% knew about breast augmentation(Implants),91.1% knew about hormone therapy,24.4% know about Clitroplasty, 38.9% know about Penectomy, 81.1% know about laser treatment for hair removal 28.9 % know about Vaginoplasty. Apart from this 1% of

respondents also mentioned about use of skin pigmentation injections being used for enhancing skin colour.

Knowledge about hormones and its use:

Table 2 focuses on knowledge, regarding hormones and its use. The respondents were asked if they know hormones can bring about any physical change to which 95.6% reported yes and 04% said no. the respondents were also asked from where or whom did they first learn about hormones being used for feminization and 62.2% of them said that they learned about it from their friends, 14.4% said that they learned from their guru, 3.3 % from their peers and another 3.3% from both friends and internet. A very small percentage of 2.2% learnt from their spouse and rest 1.1% was distributed in sources like doctors, internet and visual media

Table No. 2: Knowledge about hormones and its use

	Total	Percentage (%)
Awareness if hormones bring in change (n=90)		
Yes	86	95.6
No	04	04.4
Awareness about physical change*		
Breast size	85	96.6
Facial hair	29	33.0
Reduction in baldness	15	16.7
Softening of skin	30	33.3
Weight gain near hips and waist	49	54.4
Fair skin	25	27.8
Reduction in size of testes	11	12.2
Decrease in frequency of erection	14	15.6
Decrease in volume of ejaculation	15	16.7
More feminine voice	03	03.3
Others	02	02.2
Awareness about dose frequency (n=90)		
Yes	32	35.6
No	55	61.1
Change in dose frequency pre and post emasculation		
Yes	14	15.6
No	70	77.8
Don't know	03	03.3
Awareness about Side Effects		
Immediate side effects		
Yes	49	54.4
No	41	45.6

Major Side effects		
Yes	45	50.0
No	42	46.7
Don't know	03	03.3
Awareness about contraindications with Medicines**		
Yes	18	20
No	70	77.8
Don't know	02	2.2
Substance Use can lead to complications		
Yes	21	23.3
No	65	72.2
Don't know	03	03.3
Awareness about dietary changes***		
Yes	35	38.9
No	38	42.2
Don't know	03	03.3

*Note: includes multiple responses

**Note: Medicines for Thyroid, Diabetes, Asthma, HIV, TB, STI, CVD Blood pressure

***Note: 14 Respondents did not answer this question; n=76

The respondents were asked about their knowledge regarding physical changes that are brought about by hormones, to which 85% respondent said they knew that hormones bring change in size of breast, 54.4% said it helps in gaining weight near hips and waist, 33% said that it softens skin texture, 32.2% said it causes reduction in facial hair, about 27.8% of respondents said hormones can make them fair, 16.7% said it reduces baldness. The respondents were also questioned about changes in the male genital organs, to which 16.7% said it reduces the volume of ejaculation 15.6% it reduces erection and 12.2% said it reduces the size of testes. Apart from this 3.3% said it makes voice more feminine and 1% said that it changes the male blood in them to female blood.

These respondents were asked from where further asked about what and who was their source of information regarding these specific changes, to which 74.4% of them said they learnt about it from their friends, 7.8% learned from their doctors, 6.7% from their gurus, 6.7% from internet another 6.7% from NGOs. 3.3% said they heard it somewhere. A very small fraction of source was partner/spouse with 1% and seminars.

Their knowledge regarding frequency of dose was also assessed to see if they knew that hormones need to be taken in certain amount and doses was asked to all the 90 respondents who had

participated in the interview. A good 61.1% of them did not know that hormones are supposed to be taken in certain dosage and frequency of these doses vary. The respondents were then asked where did they learn about it, irrespective of their history of consumption and whether they knew about it or no. About 46.7% of them took the hormones in the frequency which their friends took, 14.4% were guided by their doctor, 4.4% of them did trial and error to see the results, 2.2% were informed by their guru's, 1.1% from internet and the last 1.1% said they read it somewhere.

The respondents were also asked if the dose changes post and pre emasculation and 77.8% of them said no while only 15.6% said yes. The ones who said yes (n=14) were asked if the dose increases or decreases post emasculation and 4.4% said that the dose increases, 2.2% said it decreases and the rest had no idea about it.

The respondents were asked if they knew hormones can have immediate side effects also and 54.4% of them said yes and 45.6% said no. The respondents (n= 49) who said they knew about side effects were then asked for the source of their information, 37.8% said their friends told them about it, 13.3% were informed by their family doctors, 5.6% respondents had seen their friends suffering from the side effects, 4.4% read it on internet and 3.3% were informed by their gurus.

They were also asked, can hormones have major side effects and 50% of them said yes, 46.7% said no and 3.3% did not know anything about major side effects. The immediate effects were listed out to the respondents who consume hormones and were asked if they felt any of those symptoms during their course of hormone consumption. Many of the respondents reported having those symptoms but did not know if they were immediate side effects. Similarly the non-users were also asked about these immediate effects and if they knew they were side effects. Knowledge regarding major side effects was also checked by listing out some major side effects to the respondents. After listing out all the symptoms to the respondents all of them inclusive of users and non-users were questioned if they were aware about any of the symptoms being side effect of hormone, to which 54.4% said no, 23.3% said yes and 22.2% had no response for this.

Only 20% of the respondents said that they knew other medications can cause complications if taken along with hormones,

while 77.8% of them did not know medicines can have contraindications with hormones. 72.2% of them said they did not know the use of substance along with hormones can lead to complications while only 23.3% of them said they know about it. They were again questioned for their source of information both for their knowledge regarding contraindications of other medicines and substance use.

Attitude towards feminization and hormone use

The study tried to understand the community's attitude towards feminization procedures and hormone use. All the 90 respondents were questioned about why does an individual undergo feminization. A majority of 75.6% said that they do it because they like doing it, 6.7% said that they not only do it because they like it but also because it is important for their profession, 4.4% said because everyone does it, 4.4% you need to do it to be part of the community, and few 4.4% had some other reasons.

Table No. 3 : Attitude towards feminization procedures

	Total	Percentage (%)
Reasons for feminization*(n=90)		
Everyone does it	04	4.4
You need to do it to be part of the community	04	4.4
It is important for my profession**	04	4.4
I like doing it	68	75.6
Important for profession &also I like it	06	6.7
Others	04	4.4
Reasons for Choosing Hormones* (n=58)		
It is cheap	03	03.3
Easily available	04	04.4
I was told it is the best method	17	24.3
I liked it after few uses	02	02.9
Other methods are expensive	01	01.1
I can't afford surgeries	03	03.3
It is cheap, easily available and no money for surgery	15	16.7
It is cheap and best	04	04.4
Others	08	08.9
Don't know	01	01.1
Reason for stopping it* (n=39)		
Side effects	12	13.3
I could not find the right hormone	01	01.1
My doctor advised me to	03	03.3
I did not want any more physical changes	00	00.0

My medications required me to stop using it	00	00.0
I wanted to opt for natural methods	00	00.0
I did not get the desired results	02	02.2
Finance was a problem	00	00.0
I attained what I wanted	00	00.0
Did not feel like continuing it	03	03.3
Friends/peers developed complication	08	08.9
Attended an awareness talk	01	01.1
My guru asked me to stop it	00	00.0
I was getting addicted to it	00	00.0
Others [#]		
Reasons for not yet using hormones* (n=32)		
I could not fight the right hormone for me	02	02.2
My doctor advised me not to consume	02	02.2
I do not want any physical changes	04	04.4
I am on medications which do not allow	00	00.0
I want to opt for natural methods	00	00.0
Finance is a problem	06	06.7
Peers or friends developed complication	00	00.0
Guru did not give the permission	00	00.0
Will get implants done in future	02	02.2
Others ^{##}		
If they wish to use hormones in future (n=32)		
Yes	12	13.3
No	17	18.9
Don't know	01	01.1
If doctor was consulted regarding use of hormone (n=90)		
Yes	27	30.0
No	56	62.2
If users ever took prescribed drugs (n= 58) (who gave prescription)		
Yes	11	12.2
No	22	24.4

All the 90 respondents were asked if they had ever consulted a doctor(family) regarding hormonal use for feminization, to which 62.2% said no while 30% of them said yes. The 58 respondents who were consuming or had consumed were asked if they ever took hormones prescribed by doctors and 24.4% said no while 12.2 % said yes.

Hormone consumption practices of the respondents : Table no 4 focuses on the

Table No 4 : Hormone consumption practices of the respondents

	Total	Percentage(%)
Current status of hormone use (n=90)		
Using	19	21.1
Has stopped using	39	43.3
Has never used	32	35.6

Age of initiation (n=58)		
13-15 years of age	04	04.4
16-20 years of age	14	15.6
21-25 years of age	33	36.7
26 to 30 years of age	05	05.6
31years of age and above	01	01.1
Duration of use (in years)		
In users (n=19)		
0-6 months	03	03.3
7months- 1year	03	03.3
2year-5years	07	07.8
6years-10 years	05	05.6
11 years and above	02	02.2
In individuals who have stopped using it (n=39)	02	2.2
0-6 months	02	2.2
7months- 1year	18	20
2year-5years	08	8.9
6years-10 years	05	5.6
11 years and above	04	4.4
Don't know		
nMode of Administration of Hormones* (n=58)		
Oral contraceptive pills (OCP)	01	01.1
Tablets	02	02.2
Injections	34	37.8
Creams	01	01.1
Injections &tablets	07	07.8
Cream & tablets	01	01.1
Injections & OCP	12	13.3
Name of the products(as mentioned by the respondents)		
Injections		
Progynon Depot	49	54.4
Progynon Depot & Premarin	01	01.1
Progynon Depot & Proluton	01	01.1
Progynon S	01	01.1
Don't know	01	01.1
Oral Contraceptive Pills (OCP)		
Mala D	16	17.8
Tablets		
Ayurvedic Breast Queen	01	01.1
Finasteride/Spiranolactone	01	01.1
Lynoral	03	03.3
Ovral G	01	01.1
Tab.Still breast	01	01.1
Don't know	01	01.1
Frequency of consumption (n=58)		
Injection		
Once daily	02	02.2

Once in a week	15	16.7
Twice in a week	14	15.6
Twice in a month	14	15.6
Monthly	04	04.4
Others	04	04.4
Oral Contraceptive Pills (OCP)		
Once daily	11	12.2
Twice daily	01	01.1
Twice in a month	01	01.1
Occasionally	01	01.1
Other	02	02.2
Tablets		
Once daily	03	03.3
Twice daily	04	04.4
Once in a week	01	01.1
Twice in a week	01	01.1
Others	01	01.1
Injections are administered by		
Self	01	01.1
Friends	01	01.1
Doctor	47	52.2
Doctor's Assistant	01	01.1
Self/Doctor	02	02.2
Other	01	01.1
Hormones are purchased from (n=58)		
Chemist	49	54.4
Friends	01	01.1
Dealers	05	08.5
Order Online	01	01.1
Others	03	03.3
Experienced trouble while purchasing hormones (n=58)		
Yes	14	15.6
No	43	47.8
Don't know	01	01.1
If hormones are easily available (n=58)		
Yes	47	54.4
No	09	10.0

Note: n=90 includes all the respondents, n= 32 includes non-users, n=19 includes users and n=58 includes users

The participants who were still using and had stopped using were asked for the age of initiation of hormones. The minimum age of initiation was 13 and maximum was 32 years of age. (SD= 4.107 and mean age=21.7 years).

Hormones come in variety of forms and hence the respondents were asked the mode of administration for these hormones. The 58 respondents who are either consuming hormones now or had a history of hormone consumption,

37.8% of them take hormones in form of injections, 13.3% in form of injections and OCP, 7.8% in form of injections and tablets, 2.2% in form of tablets, 1.1% in form of OCP, 1.1% in form of creams and the last 1.1% in form of cream and tablets.

The most commonly used brand within the TG /Hijra community varies according to the mode of administration. The most commonly used injectables in the community are Progyon Depot

used by 54.4% followed by 1.1% Progynon Depot and Premarin, 1.1% Progynon depot and Proluton, 1.1% Progynon S. Mala D was the only OCP used by 17.8% of respondents. In form of tablets Lynoral was used by 3.3% respondents, Ovrall G by 1.1% respondents followed by Ayurvedic Breast queen, Finasteride/spiranolactone and tab Still breast by 1.1% of respondents each. The respondents were then asked from where do they purchase hormones, 54.4% said they bought it from the local chemist (at times you have to place order for the same), 8.5% of them bought it through some dealers, 1.1% ask their friends to get it for them, 1.1% order it online and 3.3% respondents did not tell use from where but just said they get it from somewhere.

Conclusions:

Before drawing an inference to this study, what needs to be understood is that the TG community needs to be viewed beyond the umbrella of HIV. For a long time, the health needs of the community have remained centered around HIV, and this focus now has to be pushed towards other emerging needs of the community. Feminization procedures and their importance to the community must be understood. The services, policies and programs should be devised to aid them.

The community is completely relying on informal networks such as quacks and dealers in fulfilling their needs for feminization and aiding these procedures, which not only puts their life at stake for developing chronic irreversible conditions but also can lead to death. The rampant increased unsupervised use of hormone has already brought in many changes which remains unnoticed by the community due to lack of knowledge. The Transgender Bill 2014 promises gender reassignment surgeries to the community but fails to highlight procedures like hormone therapy for gender re assignment. This study was an attempt to comprehend the needs of feminization, and especially use of hormones for the same within the community and their knowledge pertaining to it. The motivation and aim for the study is to fill in the existing lacunae in research regarding the TG/Hijra community, in order to build in more comprehensive and coherent policies and programs for them

References:

- Census of India. (2011).
- Chakrapani, V. & Narrain, A. (2012). Legal recognition of gender identity of transgender people in India: current situation and potential options. *UNDP India*.
- Chettiar, A. (2015). Problems Faced by Hijras (Male to Female Transgenders) in Mumbai with Reference to Their Health and Harassment by the Police. *International Journal of Social Science and Humanity*, 5(9):752-759
- Gupta, A. & Sivakami, M. (2016). Health and Healthcare Seeking Behaviour among Transgender in Mumbai: Beyond the Paradigm of HIV/AIDS. *Social Science Spectrum*, 2(1), 63-79.
- Humsafar Trust (2012). Feminisation and substance use in the male-to-female transgender/hijra population in India: a needs assessment.
- Kalra, G. (2012). Hijras: the unique transgender culture of India. *International Journal Of Culture And Mental Health*, 5(2), 121-126.
- Lal, V. (1999). Not This, Not That: The Hijras of India and the Cultural Politics of Sexuality. *Social Text No. 61, Winter, 1999*
- Mukherjee, S. (2014). The curious case of Shanthi: The Curious Case of Shanthi: The issue of Transgender in Indian Sports. *Rupkatha Journal; Vol. VI*
- NACO,. (2017). *Technical Report Mapping and Size Estimation of Hijras and other Transgender Populations in 17 States of India*.
- Nanda, S. (1986). The Hijras of India: Cultural and Individual Dimensions of an Institutionalized Third Gender Role . *Journal of Homosexuality Vol. 11, 1986 - Issue 3-4*
- Rotondi, N., Bauer, G., Scanlon, K., Kaay, M., Travers, R., & Travers, A. (2013). Nonprescribed Hormone Use and Self-Performed Surgeries: "Do-It-Yourself" Transitions in Transgender Communities

in Ontario, Canada. *American Journal Of Public Health*, 103(10), 1830-1836.

Strouma, D. (2014). The State of Transgender Health Care: Policy, Law, and Medical Frameworks. *Am J Public Health*. 104(3): e31–e38.

Whittle, S. (2010). A brief history of transgender issues. *The Guardian*, 2nd June.