

# Hemophobia In High School Students, Guntur, Andhra Pradesh, India

Sankara Pitchaiah Podila

Department of Geology, Acharya Nagarjuna University, Andhra Pradesh, India

\*Corresponding author [email-lifeskillssankar@gmail.com](mailto:email-lifeskillssankar@gmail.com)

## ABSTRACT

Hemophobia fear of blood, is a type of specific phobia. The present study was aimed to know the Hemophobia among 8<sup>th</sup> to 10<sup>th</sup> studying students in rural and urban Government schools. The response was taken from 3399 students (8<sup>th</sup>:1175, 9<sup>th</sup>:1095, 10<sup>th</sup>:1129). The study found that the phobia was more in Namburu school students (21.31%). In the urban schools the highest percentage was noticed in SJRR school (28.96). Homeopathy, Exposure based therapy, Cognitive therapy are some of the useful treatment methods. Parents shall not neglect any specific phobia, which can influence the future.

**Keywords:** Hemophobia, Specific Phobia, Anxiety Disorder, Treatment, Rural And Urban High School Students

## I. INTRODUCTION

"Hemophobia", is derived from the Greek "haima" (blood) and "phobos" (fear). It is an abnormal and persistent fear of blood, also called a blood injury phobia. Sufferers of this very common phobia dread the sight of their own blood, the sight of the blood of another person or an animal, and sometimes printed or filmed images of blood or even thoughts of blood. Blood may remind them of their own vulnerability to injury and of the eventuality of death (<https://www.medicinenet.com>).

Hemophobia, or fear of blood, is a common specific phobia. The fear is categorized by the DSM-5 (Diagnostic and Statistical Manual, 5th Ed.) as part of the subtype "blood-injection-injury" phobias. This subtype, which also includes needle phobia, can cause symptoms that are not frequently seen in other types of specific phobias (<https://www.verywellmind.com>).

The present study was carried out to know the extent of the Hemophobia among 8<sup>th</sup> to 10<sup>th</sup> class students, studying in rural and urban Government schools.

### *Symptoms*

Phobias of all types share similar physical and emotional symptoms. With hemophobia, symptoms may be triggered by seeing blood in real life or on television. Some people may feel symptoms after thinking about blood or certain medical procedures, like a blood test (<https://www.healthline.com>).

Physical symptoms triggered by this phobia may include:

- trouble breathing
- rapid heart rate
- rightness or pain in chest
- shaking or trembling
- lightheadedness
- feeling nauseated around blood or injury

- hot or cold flashes
- sweating

translated to a fear of blood (<https://www.betterhelp.com>).

Emotional symptoms may include:

- extreme feelings of anxiety or panic
- overwhelming need to escape situations where blood is involved
- detachment from self or feeling “unreal”
- feeling like you’ve lost control
- feeling like you may die or pass out
- feeling powerless over your fear

**Causes**

Blood phobia is often caused by direct or vicarious trauma in childhood or adolescence (Bruce et al., 1985). Maybe a person had a terrifying experience involving the color red and, as a result, it may be

**II. METHODS AND MATERIAL**

A total of 3399 students was participated, out of them 1175 are studying 8<sup>th</sup>, 1095 are 9<sup>th</sup> and 1129 are 10<sup>th</sup> class. 1342 were studied in seven rural schools and 2057 in seven urban schools. Details are shown in Tables 1 and 2. Students were assembled in a classroom of the respective schools and asked them to give their response to a single question-“Do you have a fear of blood?”. The purpose of the study and the details regarding the phobia were explained in their mother tongue. The response was analyzed using statistical analysis. Percent variation was observed and presented under results and discussion.

**Table 1. Class Wise Rural School Student’s Strength**

Place/School	8th School Strength	No. of students with Hemophobia	9th School Strength	No. of students with Hemophobia	10th School strength	No. of Students with Hemophobia
Chinakakani	59	10	56	2	49	4
Namburu girls’	30	4	21	4	30	7
Namburu	97	18	96	6	86	2
Ponnekallu	92	10	78	6	86	5
Takkellapadu	64	6	47	6	47	5
Tadikonda girls’	49	4	57	5	49	6
Venigalla	79	4	69	2	101	6

**Table 2. Class Wise Urban School Student’s Strength**

Place/School	8th School Strength	No. of students with Hemophobia	9th School Strength	No. of students with Hemophobia	10th School strength	No. of Students with Hemophobia
SK	173	15	159	5	189	13
SGNKR	66	7	89	9	77	13
SJRR	130	26	93	23	93	15
SKS	100	13	94	8	116	11
P	92	8	83	0	77	0
KSR	51	8	77	24	53	6
SCMP	93	7	76	5	76	5

### III. RESULTS AND DISCUSSION

A percent variation of the rural and urban students, those suffering from Hemophobia was shown in tables 2 and 3 and figures 1 and 2 and is explained below.

#### Rural Schools

##### 8<sup>th</sup> class

Highest percent of Namburu school (18.56) were marked the Hemophobia, followed by Chinakakani (16.95%) and Namburu girls (13.33%). The lowest percent was noticed with Venigalla school (5.06%).

##### 9<sup>th</sup> Class

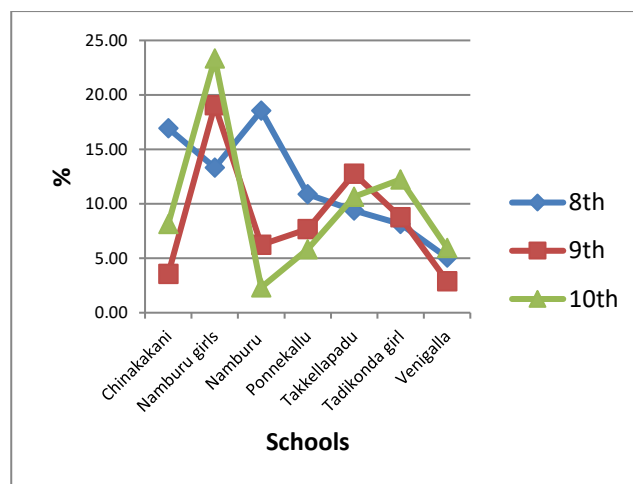
19.05% of Namburu girls school students had expressed the Hemophobia, followed by Takkellapadu school students (12.77%) and Tadikonda girl (8.77%). Comparatively, the problem is low in Venigalla (2.90%) and Chinakakani (3.57%).

##### 10<sup>th</sup> Class

Highest percent of Namburu girl students (23.33) were marked the Hemophobia, followed by Tadikonda girl (12.24%) and Chinakakani (8.16%). The problem is low in Namburu (2.33%).

**Table 3.** Hemophobia Among Rural School Students (%)

Schools	8th	9th	10th
Chinakakani	16.95	3.57	8.16
Namburu girls	13.33	19.05	23.33
Namburu	18.56	6.25	2.33
Ponnekallu	10.87	7.69	5.81
Takkellapadu	9.38	12.77	10.64
Tadikonda girl	8.16	8.77	12.24
Venigalla	5.06	2.90	5.94



**Figure 1.** Percent variation of Hemophobia in rural school students

#### Urban Schools

##### 8<sup>th</sup> Class

20.00% of SJRR students were pointed Hemophobia, followed by KSR (15.69%) and SKS (13.00%). The lowest percent was observed with SCMP (7.53%).

##### 9<sup>th</sup> Class

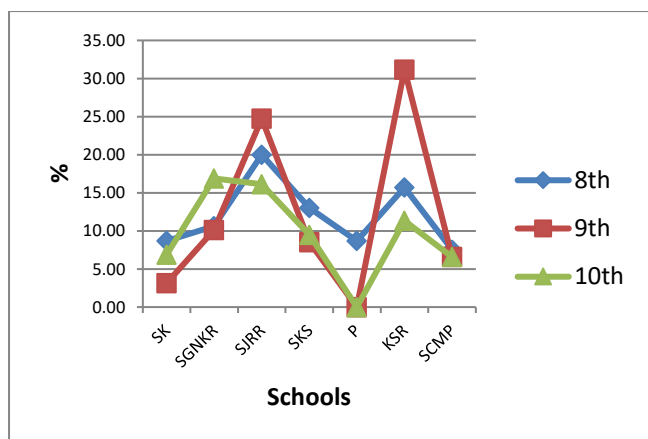
Highest percent of KSR (31.17) school students had Hemophobia, followed by SJRR (24.73%) and SGNKR (10.11%). The lowest percent was observed in SK students (3.14%).

##### 10<sup>th</sup> Class

16.88% of SGNKR students were suffering from Hemophobia, followed by SJRR (16.13%) and KSR (11.32%). The lowest percent was observed in SCMP (6.58%).

**Table 4.** Hemophobia Among Urban School Students (%)

Schools	8th	9th	10th
SK	8.67	3.14	6.88
SGNKR	10.61	10.11	16.88
SJRR	20.00	24.73	16.13
SKS	13.00	8.51	9.48
P	8.70	0.00	0.00
KSR	15.69	31.17	11.32
SCMP	7.53	6.58	6.58



**Figure 2.** Percent variation of Hemophobia in urban school students

**Comparative study**

**Rural schools**

Comparison of Hemophobia among 8<sup>th</sup> to 10<sup>th</sup> class rural and urban students was shown in table 5 and figure 3). Among the rural schools, high percent of Namburu students (21.31) had Hemophobia followed by Ponnekallu (17.21%) and Takkellapadu (13.93%). The lowest percent was observed with Venigalla (9.84%).

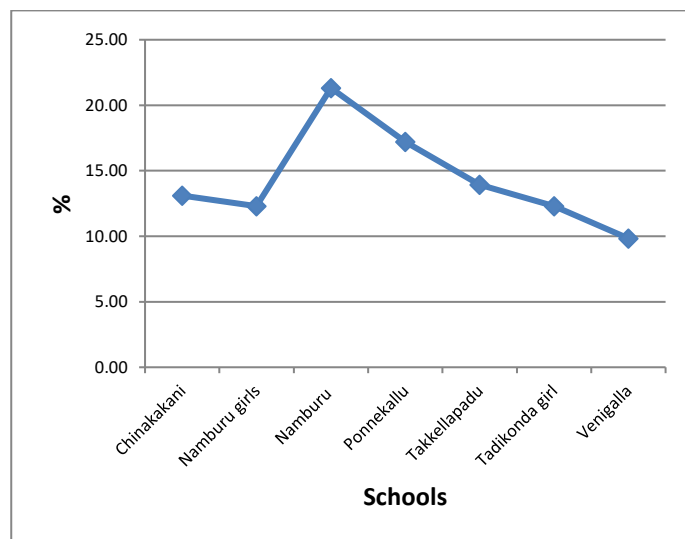
**Table 5.** Comparative Study of Hemophobia (%)

Rural Schools (%)		Urban Schools (%)	
Chinakakani	13.11	SK	14.93
Namburu girls	12.30	SGNKR	13.12
Namburu	21.31	SJRR	28.96
Ponnekallu	17.21	SKS	14.48
Takkellapadu	13.93	P	3.62
Tadikonda girl	12.30	KSR	17.19
Venigalla	9.84	SCMP	7.69

**Urban schools**

In the case of urban schools, high percent of SJRR students (28.96) had an Hemophobia (Table 4 and Figure 4), followed by KSR (17.19%), SK (14.93%)

and SKS (14.48%). The lowest percent was observed with P (3.62%).



**Treatment Methods**

Although phobias often go underreported, the statistics for people who have phobias are thought to be more than 6 million people in the United States. Women tend to be twice as likely to develop a phobia compared to men. People with phobias seem to be more likely to deal with stress by avoiding the trigger for the stress and have trouble minimizing the severity of the fearful situation. Phobia sufferers sometimes cope with their fears by talking about it, refraining from avoiding situations they find stressful, visualization, and making positive self-statements (<https://www.medicinenet.com>)

Hemophobia may also be associated with health phobias including hypochondriasis and nosophobia. In some cases, the fear of blood may be related to the fear of death (<https://www.verywellmind.com>).

The treatment involves learning how to raise your blood pressure, typically by tensing and squeezing your large muscle groups, to make it harder to faint. This treatment, systematic tensing of your muscles, is the opposite of relaxation. Relaxation can be helpful

for most phobias and anxiety problems, and may be useful to you in managing other anxiety symptoms. It's not part of the treatment for blood phobia! (<https://www.anxietycoach.com/blood-phobia.html>)

In recent years, the technique known as applied tension, applying tension to the muscles in an effort to increase blood pressure, has increasingly gained favor as an often effective treatment for blood phobia associated with drops in blood pressure and fainting (Ost et al., (1991), Ditto et al., 2009), Ayala et al., 2009) and Peterson 2004).

There are certain therapies by which this phobia is treatable. The main treatment of choice for specific phobias is Cognitive-behavioral (CBT). Behavioral techniques by which survivor is exposed to feared situations (gradually or rapidly) are frequently used. In addition, the patient is taught ways of stopping the panic reaction and regaining emotional control (Abbas and Kiran, 2015).

#### Some of the useful methods

**Exposure-based therapy** - (Singh and Singh, 2016)

**Cognitive therapy (CT)** - (Specific phobia. <http://www.med.upenn.edu>).

**Progressive desensitization** (Specific phobia. <http://www.med.upenn.edu>).

**Relaxation-** (Specific phobia. <http://www.med.upenn.edu>).

**Hypnosis (hypnotherapy)-** (Natural treatment for phobia and anxiety. <http://www.phobicssociety.org>)

**Homeopathy-** (<http://www.phobicssociety.org>).

**Herbal remedies-** (Natural treatment for phobia and anxiety. <http://www.phobicssociety.org>).

#### IV. CONCLUSION

Hemophobia, its causes, symptoms and treatment methods are reported in literature.

The highest percentage of students from 8<sup>th</sup> class, Namburu (18.56), 9<sup>th</sup> and 10<sup>th</sup> classes Namburu girls' (19.05) and (23.33) were marked the phobia. In the

case of urban schools SJRR (8<sup>th</sup>), KSR (9<sup>th</sup>) and SGNKR (10<sup>th</sup>) school students shown highest percentage, i.e., 20.00, 31.17, 16.88 respectively.

#### V. ACKNOWLEDGEMENT

Authors are thankful to Rotary club – Adharsh, Guntur Commissioner, GMC and the Authorities of Acharya Nagarjuna University for the financial assistance.

#### VI. REFERENCES

- [1]. Abbas Syeda Sarah and Kiran Sehrish (2015), People With Fear Of Height; Hemophobia, World Journal Of Pharmaceutical And Medical Research, 1(1), 52-5.
- [2]. Ayala, E.S.; et al. (2009), "Treatments for blood-injury-injection phobia: a critical review of current evidence", Journal of Psychiatric Research, 43 (15): 1235–1242 REVIEW, doi:10.1016/j.jpsychires.2009.04.008, PMID 19464700.
- [3]. Bruce Thter, A.; Himle, Joseph; Curtis, George C. (1985) "Blood-Injury-Illness Phobia: A Review", Journal of Clinical Psychology, 41(4):451-459.
- [4]. Ditto, B.; et al. (2009), "Physiological correlates of applied tension may contribute to reduced fainting during medical procedures", Annals of Behavioral Medicine, 37 (3): 306–314, doi:10.1007/s12160-009-9114-7, PMID 19730965.
- [5]. Natural treatment for phobia and anxiety. Available at <http://www.phobicssociety.org.uk/natural-treatment-for-phobia-and-anxiety/> Accessed on 24 December 2015. onal Journal of Basic & C.
- [6]. Ost, L.G.; et al. (1991), "Applied tension, exposure in vivo, and tension-only in the treatment of blood phobia", Behaviour

- Research and Therapy, 29 (6): 561–574, doi:10.1016/0005-7967(91)90006-O, PMID 1684704.
- [7]. Peterson, Alan L. (Lt. Col.); Isler III, William C. (Capt.) (September 2004), "Applied tension treatment of vasovagal syncope during pregnancy", *Military Medicine*, 169 (9): 751–3.
- [8]. Singh Jarnail, Singh Janardhan (2016) Treatment options for the specific phobias *Int J Basic Clin Pharmacol*, ;5(3):593-598.
- [9]. Specific phobia. Available at [http://www.med.upenn.edu/csta/phoias\\_treatment.html](http://www.med.upenn.edu/csta/phoias_treatment.html). Accessed on 26 December 2015.
- [10]. <https://www.betterhelp.com/advice/phobias/coping-with-the-fear-of-blood/>
- [11]. <https://www.verywellmind.com/fear-of-blood-hemophobia-causes-and-symptoms-2671861>
- [12]. <https://www.healthline.com/health/hemophobia>
- [13]. <https://www.gomentor.com/articles/Hemophobia>
- [14]. <https://www.verywellmind.com/list-of-phobia-2795453>.
- [15]. <https://www.medicinenet.com/script/main/art.asp?articlekey=12337>

Cite this article as :

Sankara Pitchaiah Podila, "Hemophobia In High School Students, Guntur, Andhra Pradesh, India", *International Journal of Scientific Research in Science and Technology (IJSRST)*, Online ISSN : 2395-602X, Print ISSN : 2395-6011, Volume 6 Issue 1, pp. 153-158, January-February 2019.

Available at doi :

<https://doi.org/10.32628/IJSRST196126>

Journal URL : <http://ijsrst.com/IJSRST196126>