# Jago Nari: Rise of Women in Bangladesh to Eradicate Sexual Harassment Using Emerging Technologies of Android Application

Eradicate Sexual Harassment Using Emerging Technologies

<sup>1</sup>Md. Moshiur Rahman, <sup>2</sup>Samrat Kumar Dey, <sup>3</sup>Arpita Howlader

<sup>1</sup>Lecturer, School of Science and Technology (SST), BOU <sup>2</sup>Assistant Professor, Department of CSE, DIU <sup>3</sup>Lecturer, Department of CCE, PSTU School of Science and Technology (SST), Bangladesh Open University (BOU), Gazipur-1705, Bangladesh

*Abstract*: Perception towards sexual Harassment is, at times, intricate and agitated, which beget us feel malicious as it is contiguity on societies' vital ethics. In precise, any culture or religion in our communities and also any personal interrelations can not be overlooked. The number of victims of mass atrocities is increasing day by day, in which many of the cases are inexpressible. In current ear, the emergence of smartphones has rehabilitated the demarcation of mobile phones, because it is no longer just a communication tool, but also an essential part of the people's daily life as well as security. The goal of our study is twofold: first- to comprehend the utility of elimination of Sexual Harassment through mobile devices, second- to produce a new security application, based on the findings of this study, which offers direct communication between Victim and helpers.

Index Terms: Sexual Harassment, android application, smart solution, one-touch solution, safely report.

## I. INTRODUCTION

Sexual Harassment over women is a global phenomenon that exists even beyond cultural, geographical, religious, social and economic context. There can be a great variety of views and opinions of Masses to the matters involved in sexual Harassment. This one is all the further appreciated that such unambiguous and devoted agreement is developing global on the straightforward facts that not only a woman but also a man of any age should have to tolerate such conduct, everyone should make applicable procedures directed at stopping and removing Sexual Harassment. It is not only social but also religious, cultural, persons' Self-esteem, economic safeties of society as a whole to inhibit such conduct. Daily news reports are filled with atrocities, including physical and psychological torture, sexual harassment, sexual assault, rape, dowry-related violence, trafficking, forced prostitution, coerced suicide, and murder [5]. Rape and supplementary procedures of sexual attack are often underreported in worldwide. Whether the attack is perpetrated by some kind of Lothario, wanton, Passionate persons finding from mischievous environmental status or sometimes from well-known status. Research has shown very clearly that workplaces in which Harassment is allowed to occur tend to have sharply falling productivity [1]. Now a day places and age of woman are not mandatory or any noticeable fact to such kind of brutes or barbarous inhuman. Putting men and women together in close quarters creates a myriad of difficulties [2]. Women have struggled for equivalence in society and regardless of creating great paces, there is still a level of dissimilarity within definite areas of the universal. The Sex discrimination ordinance (which was enacted in 1995 and came into force in 1996) now expressly defines and prohibits sexual Harassment in a wide range of fields, including employment, education, and the provision of goods and services [3]. Persons who have acquainted or experienced sexual Harassment discern what an extremely opprobrious and ignominious object it is. The aforementioned so-called condemnatory, in reality, the target repeatedly escapes taking steps against the harasser, both for the panic of reprisal and so as not to have to think of and remember the occurrence or instances again and again. There are many laws and rules for the Prevention of Sexual Harassment adopted or imparted by individual countries' governments. In addition, many humanitarian agencies making social movements and humanitarian awareness to eliminate sexual harassment of women or girls. Also taking steps after persons become a victim of it. But need self-security and support immediately when this happened. Now a days, everyone in recent year, use a mobile phone as well as smartphone, which is an essential part of the people's communication and daily life. Based on our research, we produce a new security application using the android platform for the prevention of sexual harassment of women or girls by emerging technologies solution-just in one touch.

## **II. LITERATURE REVIEW**

Sexual Harassment may be very challenging for somebody to report. Describing or reporting sexual Harassment can make victims' sensation embarrassed and disorganized. According to Ain O Salish Kendra (ASK), total 527 incidents of rape or attempt to rape was documented between January and September 2014 in Bangladesh [4]. Among these only 291 cases were filed, 43 victims died after the rape and 11 other committed suicide [4]. Predictably, a better part of the world's women will be violated by her relatives or neighbor some time during the period of their lives. Heretofore, sexual violence or Harassment often takes place inside closed doors

and it was difficult for community or human society to pin down, and it becomes even more challenging when it is not considered to be a crime because of perfect complain or no complaining report from victims. The designation "sexual harassment" has since been adopted by women in many other countries who have used it to characterize their experiences, ensure recognition of these forms of conduct and seek to have them prevented [6]. Available data from the police department give some indication of the extent of these types of violence [5]. The data shown in Table 1 has been taken from 22 police stations in the capital city over three years [5].

Year	Rape	Sexual Harassment
2001-02	228	74
2002-03	281	87
2003-04	291	136
Total	800	297

Table 1. Reported incidents of violence against women in police stations

This data in Table 2 indicates that in 2004, 3083, women were raped. The outbreak of violence against women from January to December 2004 are 3083 Rape & 17 Murder or injury after rape. The ever-increasing rate of rape crimes is an alarming phenomenon and depicts the diminishing value of women in society [5]. About the size of Iowa, Bangladesh is one of the world's most densely populated countries with a population of over 161 million (The World Facebook, 2012) [7].

Table 2. Reported cases of rape in 9 daily newspapers from 2000-2004

Year of reporting	2000	2001	2002	2003	2004
Number of cases of rape reported	564	605	1434	1550	1043

The majority (60.0%) of alleged rape cases were in the age group of 11-20 years followed by 21-30 years of age group (20.0%), and 10.0% cases were below the age of 10 years (Table 3) [4]. This retrospective study was carried out on 330 sexually assailed alleged rape victims' report forms, who reported at Faridpur Medical College, Bangladesh, from 2007 to 2011 for medical examination [4].

Table 3. The age group of victims (N = 330)

Age groups in Years	Frequency	Percentage
0-10	33	10
11-20	198	60
21-30	66	20
31-40	33	10

21-30662031-403310No positive finding in favor of sexual intercourse was found in the maximum (72.4%) of cases (Table 4) [4]. Physically forced sexual Harassment consists of assaults happening when the target was forced or threatened with strength into sexual contact. In 2013 a total number of 814 females were raped; among them, 452 were children below the age of 16, and 127 were victims of gang rape [4]. Involuntary poignant or touching of a sexual nature such as touching of private parts, forced kissing, take hold of, stirring, rubbing

up against someone in a sexual way, even if it is over her clothes. Initial reporting without washing the sexual organs and put on the

latest diagnostic methods like DNA testing might support to identify the invader.

Table 4. Frequency of studied variables (N = 330)

Variables	Frequency	Percentage
Marital status	Trequency	I ci centage
Unmarried	214	64.80
Married	15	4.60
Divorced	101	30.60
Pattern of assailants Known		
Acquaintance	106	32.00
Neighbors	33	10.00
Relatives	44	13.30
Friends	31	9.30
Unknown	·	
Strangers	94	29.70
Other	16	5.70

Place of occurrence		
Victims' houses and nearby place	212	64.20
Relatives' houses	40	12.10
Assailants' houses	44	13.30
Other places	34	10.40
The time interval for the medical exam		
Within 24 hours	47	14.20
Within three days	148	44.80
More than three months	135	41.0
Numbers of assailants	·	
Single	234	71
More than one	96	29
Opinion		
Negative	239	72.40
Positive	91	27.50

#### **III. MATERIALS AND METHODS**

Sexual Harassment is prevailing in Bangladesh with a dangerous condition. It is not just a problem in some countries; it is a global phenomenon. It is one of the world's furthermost overlooked public health topics, and one of the world's most extensive social problems. Violence against women is amongst the most severe threats to overall development and progress in Bangladesh [5]. According to U.N. Women, 7 out of 10 women and girls are victims of violence sometime in their lifetime. In the present situation, it takes place as terrific or horrific form, not only behind the close door but also in publicly or road or street by an individual or a group. In the zone of human rights counting women's rights, Bangladesh has contracted onto many international human rights and humanitarian law agreements, including the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1984. Dhaka, May 14, 2009 - The High Court laid down a set of guidelines to stop or prevent sexual harassment on women and children at workplaces, educational institutions, and on the streets. The justices of tribunal Syed Mahmud Hossain and Kamrul Islam Siddiqui gave the judgments or rulings on a petition recorded filed in the public interest by the administrative director of Bangladesh National Women Lawyers' Association Salma Ali. In Bangladesh 1,479 women had been raped in six months during January of 2009 to June of 2009 [4]. The petition was filed on August 7, 2008, following an incident of sexual Harassment occurred at Jahangirnagar University against a teacher of drama and dramatics. The court in the guidelines asked the ruling classes to set up sexual harassment objection or complain report centers at educational institutions and constitute committees to investigate charges and also at workplaces. A lady will head such working group that will have no smaller quantity than five members or associates, mostly women. The argumentative or unreceptive situation at work and educational organizations should not be permitted. Divisional accomplishment should be occupied against those who responsible for sexual harassment at the workplace, the court said. A lawyer for the petitioner, Fawzia Karim, said, "The punishment for sexual abuse can be both fine and imprisonment." The High Court questioned after the petition was filed by the government and others concerned to explain why guidelines on sexual Harassment will not be given. According to the American Medical Association (AMA), sexual Harassment is measured as the most under-reported violent crime in the USA.

Sexual Harassment in Bangladesh is so intensive, so pervasive, and so overwhelming that young girls are committing suicide to escape it. A study by BNWLA shows 91% of the girls aged 10-18 years have experienced sexual Harassment. It does not matter whether females/girls at work, in school, on the street, they in Bangladesh are often groped, flashed, taunted, rubbed, beaten and raped. A total number of reported victims of violence against women from January to September 2014 alone is 210. Studies show that due to social oppression and fear of retaliation the reported number is far less than the real number. This is a silent but awful crime. Due to social stigma and of awareness, the victims of this crime do not raise their voice against it. But sexual Harassment happens to be such a debilitating crime which eats up the very core of a human being. It hurts her dignity, makes her feel powerless, helpless and often she may think herself responsible and deserving of such treatment. Therefore, we strongly believe that people of Bangladesh need a solution where victims of sexual Harassment can safely report the crimes committed against them, we have developed a solution that can ensure personal safety, connects women to safety networks, crowdsourced complain system and can raise awareness for violence against women. 91% of the girls aged 10-18 years have experienced sexual Harassment. Studies show that due to social oppression and fear of retaliation the reported number is far less than the real number. We need a solution where victims of sexual Harassment can safely report the crimes committed against them. Women walking down the streets of cities in Bangladesh face a daily onslaught of sexual Harassment. Euphemistically known as "Eve-teasing," it takes many forms, from women being told by men to adjust their clothing or headgear to suit religious mores to sexually suggestive remarks, groping - and more serious sexual assaults. Now a smartphone app based on Android O.S. has been created to help combat this. Making women feel safer is a principal aim of the project. The Name of this Application is "Jago Nari," meaning "Rise of the Women" in Bengali - allows women to combat public Harassment in the following ways. First, it has an on-screen button that, if pressed, the phone automatically sends text messages to the woman's emergency contacts saying where she is and that she needs help. Lastly, the incident data from all users is collated to create a heat map showing the areas where Harassment is at its worst. Besides, the user can annotate the data

## ISSN: 2455-2631

with a brief blog post about the type of Harassment they experienced. More importantly, Volume Plus button will record the voice of the culprit during the Harassment just in one press. Features of our developed applications are as follows.

- Ensure personal safety
- Connects women to safety networks
- Crowdsourced complain system
- Awareness of violence against women
- Safely Reporting
- Hidden Voice Recording Systems just in one Click
- Hotline Number for any Report
- Super Circle to Send Emergency Message During Harassment
- Any victim can share his story by hiding her name
- User can see a map that represents the most alarming zone in red color
- User can search for any information about state law against sexual Harassment

## **IV. IMPLEMENTATION AND DISCUSSION**

## A. Super Six Circle

Super six circle is shown in Figure 1, which is an essential and practical solution approach for the victims of Sexual Harassment. By using our developed application, users can easily predefine Five contacts from her contact list to send messages at Emergencies. Those contacts will be automatically saved in databases. Therefore, just in one touch, an Emergency message will be sent to those predefined contacts to request for help in danger, which is shown in Figure 2. Another thing is that the user can change those numbers according to her needs.



Figure 1. Super six circle for sending an emergency message to users nearest support person during harassment

Figure 2. One-touch solution for emergency help

## B. Crowdsourcing Complain System in Safely Manner

Complaining about the assault to the nearest security provider is an important issue. There were lots of incidents in the past on sexual Harassment where victims were unable to report against the crime. Moreover, it's sometimes shameful to report against these types of crimes. Therefore, we provide a solution shown in Figure 3 to report safely to the security provider office against these crimes in crowdsourcing complaint systems.

351

agu:
ana:
n Sandri en
undin-ma
france.
saithe of e

Figure 3. Crowdsourced complain system in safely manner

# C. A map that Represents most Alarming Zone in Red Color

The idea is to bring high-risk areas to the attention of the authorities so action can be taken. Users of this application can easily see the map of victims reporting area in Red Color, which is shown in Figure 4. The reporting area will be shown on the map according to the GPS position of the Victim. From this, it can easily be determined which area of the country is most affected by these problems.

অভিযোগকাহীদের মহল	
Refesh	
International Intern	

Figure 4. User can see a map that represents the most alarming zone in red color

#### D. One-Click Proof

Proof of any crime is an essential weapon. But due to lack of evidence, sometimes Victim remains silent to report against that criminal. In this context, we bring a one-click Audio Recording solution shown in Figure 5. From our developed application, the Victim can easily record the sound of her surroundings by just pressing the Volume Plus button of her Device to record the voice or presence of the criminal. The recorded sound will be stored on the External Storage of that device. Later, that recorded sound can be used as a healthy statement of proof.



Figure 5. User can record the evidence of a victim by just press volume plus button

#### E. Some More Features

Jago Nari is not only just a smartphone application but also an essential tool against sexual Harassment. It has lots of features including the true story of victims, awareness messages with Government Hotline Number, and laws of Government, Lots of Tips and Tricks with Support Center Contact Number. Hopefully, this application will play a significant role in eradicating this epidemic problem from our society as well as from our country.

#### **V. CONCLUSION**

Sexual Harassment has to turn out to be a part of the national or international discussion, and a cooperative or combine awareness and desire for action have emerged. Global or worldwide approximations bring out that around 1 billion women wide-reaching have experienced some form of Sexual Harassment. These depths like an ocean of measurements discoveries the undiluted depth and extensiveness of gender-based ferocity and demonstrates the firmness of the quandary we face. Through this paper, we stated an ethnography study with a schematic to recognize the problem of sexual harassment in the workplace or public places or different environments. As information and communication technologies and Internet offer new, innovative ways to provide a more comfortable life, more protection, more security, and more independence, consequently the "Jago Nari" smartphone app is an example of innovative use of technology to provide women with tools to protect themselves and to eradicate sexual harass and assault. We technologically advanced this specific strategy intermediation that can be accomplished with a nominal number of taps, which creates the app facile to use in inconvenient or threatening circumstances.

#### REFERENCES

- N. Haspels, Z. M. Kasim, C. Thomas, and D. McCann, "Action against Sexual Harassment at Work in Asia and the Pacific," in Bangkok, International Labour Office, 2001, ISBN 92-2-112824-5.
- [2] R. A. Diehl, G. C. Havrilak "Sexual Assault In The Military: Ethical Dilemma Or National Security Issue?" in Georgetown University Washington, D.C. October 25, 2012.
- [3] C. J. Petersen, "Sexual Harassment in the Workplace," in The University of Hong Kong, Published by Centre for Comparative and Public Law, Occasional Paper No. 4, June 2002.
- [4] Arzu A. Women Repression Unabated Despite Stringent Law. 1,479 Rape Cases Recorded in 6 Months. The Daily Star. 2009 Oct 17 [cited 2014 Dec 15].
- [5] S. A. Farouk, "Violence against women: A statistical overview, challenges and gaps in data collection and methodology and approaches for overcoming them," U.N. Division for the Advancement of Women in collaboration with: (ECE) and (WHO) 11 14 April 2005, Geneva, Switzerland

in collaboration with: (ECE) and (WHO) 11 - 14 April 2005, Geneva, Switzerland.

- [6] D. McCann, "Sexual harassment at work: National and international responses." Publications of the International Labour Office, ISBN 92-2- 112680-3 (softcover) & ISBN 92-2-115798-9 (.pdf version) First published 2005.
- [7] K. Bakker, "Eliminating Sexual Harassment of Adolescent Girls in Bangladesh: A Comparative Analysis of Multilevel Strategies," February 2013.