

# Addressing The Challenges Faced By Domestic Abuse Victims: The Role of Ai In Prevention, Response, And Support In India

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## Abstract

*Domestic abuse is a pervasive problem in India, with high rates of physical, sexual, and emotional violence against women reported across the country. The introduction of the Protection of Women from Domestic Violence Act in 2005 was a significant step towards addressing the issue, but challenges remain in executing the law and supporting victims. This paper delves into the obstacles and requirements faced by domestic abuse victims in India, alongside AI's potential in preventing, responding to, and supporting them. Employing a mixed-methods approach, it includes surveys and interviews with victims and stakeholders. The findings highlight the most commonly agreed upon barriers to accessing justice are stigma and cultural norms, with 77.8% of respondents strongly agreeing or agreeing. Geographic barriers and fear of retribution were also identified as significant barriers, with 96.3% and 100% of respondents respectively indicating that they do not experience these barriers. These findings indicate that interventions utilizing AI have the capacity to offer broader support to victims of domestic violence in India. To address this issue, the authors propose an artificial intelligence (AI) powered one stop platform to support victims of domestic abuse. This platform will provide a centralized, easy-to-use resource for victims to access information, support, and services related to domestic abuse.*

**Keywords:** Artificial intelligence, domestic violence, legal awareness, chatbots, national family health survey

## INTRODUCTION

Domestic abuse, alternatively termed domestic violence, constitutes a significant concern in India, impacting individuals irrespective of their gender, age, or socio-economic status. It encompasses various manifestations such as physical, emotional, sexual, or psychological abuse occurring within intimate relationships, including physical violence, emotional coercion, financial exploitation, and sexual aggression.

### Prevalence of Domestic Abuse In India

In India, domestic violence is a widespread problem that affects millions of people each year, yet it remains a largely hidden and underreported crime. According to the National Family Health Survey (NFHS)[1], more than one-third of women in India have experienced physical or sexual violence from their partners. Additionally, a study conducted by the International Centre for Research on Women found that the rate of domestic abuse in India is higher than the global average. Studies have estimated that between 25% and 70% of women in the country have experienced some form of abuse from a partner (United Nations Population Fund, 2017 [2]).

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### ***Introduction of DV Act 2005 in india***

Acknowledging the extensive prevalence of domestic abuse in India, the Indian government enacted the Protection of Women from Domestic Violence Act (DV Act) in 2005[4]. The Act provides a legal framework for the protection of women from domestic violence, and includes provisions for protection orders, maintenance for victims, and the establishment of shelters and service providers.

The DV Act outlines domestic violence as any action, failure to act, behavior, or conduct that causes harm, injury, or poses a threat to the life, safety, or mental and physical health of the affected individual. The act is considered as one of the milestone act in India as it has a wide scope, it also includes emotional, verbal and economic abuse under domestic violence. Nevertheless, despite the presence of this legislation, numerous women encounter notable obstacles in obtaining justice and safeguarding themselves.

### **Issues In Executing The DV Act By Victims**

One of the key challenges faced by victims of domestic violence in India is a lack of awareness and knowledge about their rights under the DV Act. Many women are not aware of the legal protections available to them, and may not have access to legal resources or support to help them navigate the legal system. Another challenge faced by victims is the reluctance of law enforcement officials to take domestic violence seriously. Police officers and other officials may not view domestic violence as a serious crime, or may be unwilling to intervene in cases involving family members. This situation may leave victims feeling helpless and without options. Furthermore, numerous victims of domestic violence in India encounter societal and cultural pressures that dissuade them from speaking up or seeking assistance.

Women who do come forward may face stigma and discrimination, and may be ostracized by their communities or even their own families. Overall the DV Act represents an important step towards addressing domestic violence in India, there are still significant challenges to be overcome in terms of raising awareness, providing support and resources to victims, and ensuring that law enforcement officials take domestic violence seriously. As a result victims face numerous challenges and needs in seeking help and support.

In the recent past the potential of AI to help prevent, respond to, and support victims of domestic abuse had been discussed globally and is an area of growing interest. Unfortunately, empirical studies in the field of domestic abuse and AI in India do not unequivocally support the claim that AI can effectively prevent, respond to, and support victims of domestic abuse in India. While there has been some research conducted on the use of AI in addressing domestic abuse in other parts of the world, it may not be directly applicable to the Indian context. This is particularly true in India, due to the existing impediments in current data access, sharing and usability of Indian judgments Indian court rulings, as valuable public assets, are frequently not available in machine-readable formats. Consequently, this presents technical challenges in accessing fundamental legal databases, which are essential prerequisites for any potential AI advancements in the Indian legal system. Given the cultural and societal differences in India, it's important to have more local research studies to understand the specific challenges and needs of domestic abuse victims in India, as well as to evaluate the effectiveness of AI-based solutions in this context.

This paper discusses the challenges and requirements faced by domestic abuse victims in India and aims to investigate the potential of artificial intelligence (AI) in prevention, response, and support. To investigate the challenges faced by victims of domestic abuse, we used a mixed methodology, which includes both quantitative and qualitative methods to address our research question. The remaining of the paper is organized as below; in Section II we present the related work on prevalence of domestic abuse in India. In section III and IV we give details of research questions and methodology respectively. The results are in section V followed by discussion in VI and conclusion in section VII.

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## **RELATED WORK**

### **Definition And Types Of Domestic Abuse**

Domestic abuse, also known as domestic violence, is defined as any behavior within an intimate relationship that is used to gain power and control over the other partner.

The Protection of Women from Domestic Violence Act of 2005[4] categorizes domestic violence as any action, inaction, behavior, or conduct of the respondent (partner) that causes harm, injury, or has the potential to cause harm or injury to the aggrieved person (victim). The Act acknowledges various forms of domestic violence, encompassing physical, sexual, verbal, emotional, and economic abuse, among others (DV Act 2005) [3].

### ***Current challenges and needs of domestic abuse victims in India***

The study (Kishor, S., & Johnson, K. 2004) [6]. aims to identify the challenges faced in implementing the DV Act and to provide recommendations for improving the implementation of the same. The study is based on a multi-country survey that collected data from 24,000 women across ten countries, including India. The data were collected through face-to-face interviews with women aged 15-49 years, using a structured questionnaire. In India, the survey covered 6,902 women from four states: Uttar Pradesh, Rajasthan, Maharashtra, and Tamil Nadu. The study found that the implementation of the PWDVA in India faced several challenges. A primary obstacle involved insufficient awareness among law enforcement officials and the public regarding the legislation. Many women were not aware of the legal protections provided by the act, and many law enforcement officials were not familiar with the provisions of the act. The study also found that there was inadequate training of personnel, such as police officers and lawyers, on how to handle cases of domestic violence. This lack of training often resulted in the mistreatment of women who reported domestic violence. Moreover, the study found that there were low reporting rates by victims of domestic violence in India. This was due to various reasons, including fear of retaliation, social and cultural norms that normalized domestic violence, and a lack of trust in the justice system. The study recommends several measures to improve the implementation of the PWDVA in India. These include increasing awareness about the act among the general public and law enforcement officials, improving training for personnel on handling cases of domestic violence, and providing support services for victims of domestic violence. In conclusion, Kishor and Johnson's (2004)[6] study highlights the challenges faced in implementing the PWDVA in India and provides recommendations for improving the implementation of the act. The study emphasizes the need for a multi-sectoral approach to addressing domestic violence in India, including increasing awareness about the act, improving training for personnel, and providing support services for victims of domestic violence.

Bansal's (2018) [5]. paper provides an overview of the causes and consequences of domestic violence in India, as well as suggestions for remedies.

The paper emphasizes the frequency of domestic violence in India, identifies its root causes, and examines its repercussions. The paper suggests remedies to address domestic violence in India, including legal and policy measures, interventions to change social norms, and support services for victims. The limitation of the paper is that it primarily focuses on the causes and consequences of domestic violence in India without providing a detailed analysis of the effectiveness of existing remedies.

### **The Potential of AI In Addressing Domestic Abuse**

The potential of AI in preventing, responding to, and supporting victims of domestic abuse is an emerging area of research. AI can be used to identify patterns and predict instances of domestic abuse, provide information and support to victims, and improve the responsiveness and efficiency of service providers. For example, a study by Bates et al. (2018) [7]. explored the use of machine learning algorithms to predict domestic abuse incidents in real-time, allowing for early intervention and prevention. the use of a chatbot to provide information and support to victims of domestic abuse. In addition the AI-powered chatbots and hotlines can provide a safe and accessible means for victims to

seek support and information about available resources (Kaur & Singla, 2019) [8]. These systems can operate 24/7 and can provide personalized responses based on the specific needs and circumstances of the individual (Kaur & Singla, 2019)[8]. However literature reports these types of chatbots available in countries like Africa, Philadelphia etc.

## RESEARCH QUESTIONS

### Establishing The Need For Research Work

Domestic abuse is a serious and widespread problem in India, affecting millions of people each year. The current support systems in place for victims of domestic abuse in India, including legal and healthcare systems, are not always adequate or accessible to meet the needs of victims. As a result, there is a critical need for research to better understand the challenges and needs of domestic abuse victims in India, as well as to investigate innovative solutions to address these issues. Our research study addresses the following research questions.

*RQ 1.* What are the most common challenges and needs faced by domestic abuse victims in India?

*RQ 2.* How can AI be utilized to address these challenges and meet the needs of victims in India?

### Research hypothesis

*Hypothesis 1:* The most common challenges and needs faced by domestic abuse victims in India are likely to include physical and emotional harm, financial insecurity, and difficulty accessing support services.

*Hypothesis 2:* AI can be utilized to address these challenges by using data analysis to identify patterns of abuse, predict potentially dangerous situations, and provide support and resources to those who need it.

Furthermore, chatbots and virtual assistants enhanced by AI can offer victims confidential and readily accessible support and information.

## METHODOLOGY

The methodology employed in this research paper utilizes a mixed-methods approach, encompassing both quantitative and qualitative methods. To begin, we conducted a comprehensive literature review of existing research on domestic abuse in India, as well as on the potential of AI to prevent, respond to, and support victims of domestic abuse. This included searching scholarly databases, government reports, and other relevant literature from reputable sources. We conducted a focused group interview with domestic abuse survivors and service providers to gain insights into their needs, challenges, and experiences with current support systems. The interview involved a group discussion led by a series of open-ended questions, with the goal of delving into participants' viewpoints on the subject. The session was recorded and transcribed for further analysis.

### Participants

The participants of the research study consisted of a total of 27 domestic abuse victims living in Maharashtra. A sample of participants selected for convenience was gathered from diverse locations across Maharashtra. Selection criteria for participants were based on self-reported experiences of domestic abuse within the past year. Participants were recruited from various sources, including shelters for domestic abuse victims, healthcare facilities, and community organizations.

The sample encompassed diversity in terms of age, gender, socioeconomic status, and geographical location. The sample was made up of 27 females, ranging in age from 25 to 45 years old. Participants hailed from urban as well as rural areas, representing a spectrum of socioeconomic backgrounds. It's worth to mention that all participants were informed about the aim of the study, the nature of their participation, and that they could withdraw from the study at any time, and confidentiality was guaranteed.

## DATA COLLECTION

### Surveys

Participants will be asked to complete a survey designed to gather information about their experiences with domestic abuse, including the types of abuse they have experienced, their challenges and needs, and their perceptions of the potential of AI in addressing these issues. The survey was administered in person to ensure anonymity and accessibility.

### Interviews

In-depth interviews will also be conducted with a subset of participants to gather more detailed information about their experiences with domestic abuse and their views on the potential of AI in addressing these issues. The interviews will be conducted by trained research assistants and will be audio-recorded for transcription and analysis.

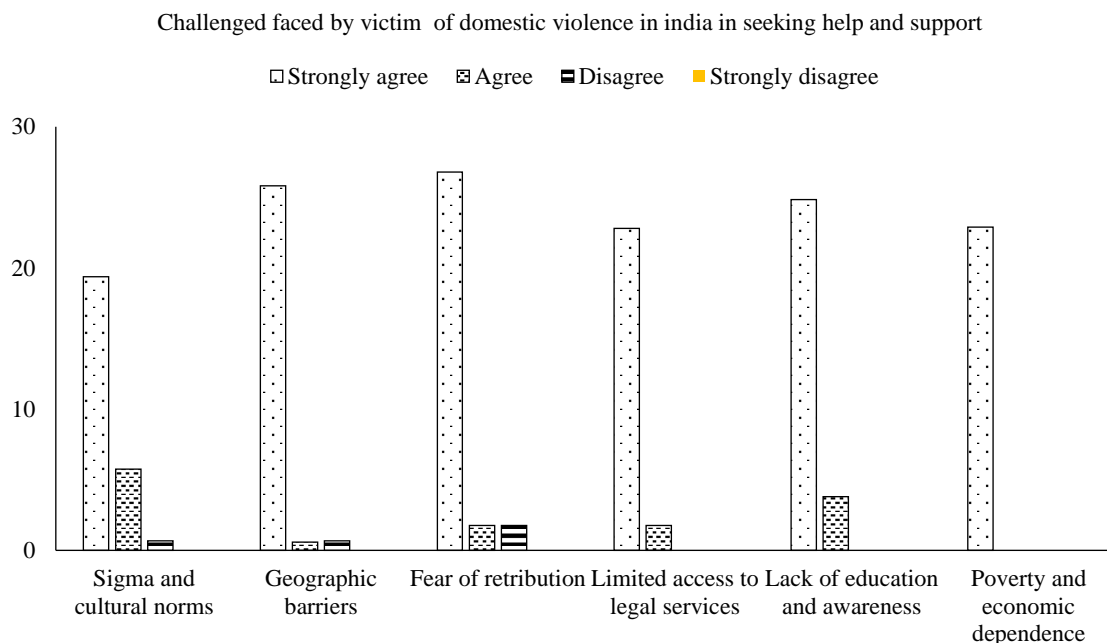
### Data Analysis

The data obtained from both surveys and interviews underwent analysis employing qualitative and quantitative methods. Descriptive statistics were utilized to scrutinize survey data for patterns and trends, while thematic analysis was applied to interview data to uncover common themes and insights.

## RESULTS

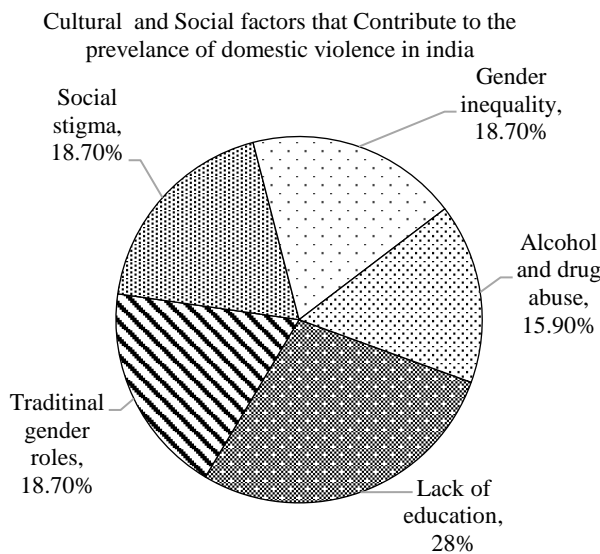
### Findings on The Challenges And Needs of Domestic Abuse Victims In India

The results of the study provided insights into the most common challenges and needs faced by domestic abuse victims in India. This information will be useful for identifying gaps in current support services and for developing targeted interventions. The results are shown in figure 1 and Figure 2.



**Figure 1.** Challenges faced by victims

From the Figure 1 it can be observed that the most commonly agreed upon barriers to accessing justice are stigma and cultural norms, with 77.8% of respondents strongly agreeing or agreeing. Geographic barriers and fear of retribution were also identified as significant barriers, with 96.3% and 100% of respondents respectively indicating that they do not experience these barriers. Limited access to legal services was reported as a barrier by 85.2% of respondents, while lack of education and awareness was identified by 92.6%. Poverty and economic dependence were also recognized as barriers by 85.2% of respondents.

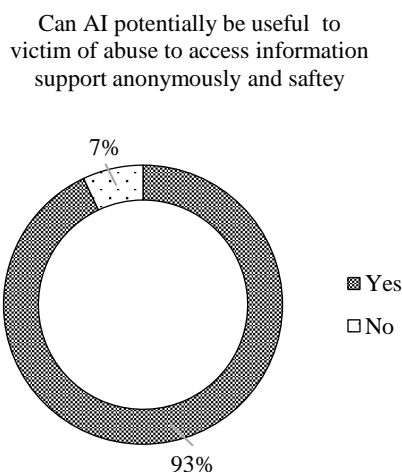


**Figure 2.** The potential of AI for legal assistance

In summary, the findings indicates that stigma and cultural norms, limited access to legal services, lack of education and awareness, and poverty and economic dependence are identified as significant barriers to accessing justice. Geographic barriers and fear of retribution, on the other hand, are not perceived as major barriers. These findings suggest that addressing stigma and cultural norms, improving access to legal services, increasing education and awareness, and addressing poverty and economic dependence are important steps towards improving access to justice.

**Perceptions of the potential of AI in addressing domestic abuse**

In our study, 91% of the participants believed that AI has the potential to be useful in addressing concerns related to domestic violence anonymously. This represents a high degree of agreement among participants about the potential benefits of using AI in addressing domestic violence.



**Figure 3.** Survey findings on need for AI

Overall, these findings highlight the potential benefits of using AI in addressing domestic violence in India. However, they also suggest that there are significant challenges that must be addressed to ensure that AI-based interventions are effective in meeting the needs of victims. To address this issue, we propose an artificial intelligence (AI) powered one stop platform to support victims of domestic abuse. This platform will provide a centralized, easy-to-use resource for victims to access information,

support, and services related to domestic abuse. The platform will use AI algorithms to analyze user data and provide personalized recommendations and referrals based on the user's needs and location(Figure.3). It will also offer a range of tools and resources, such as safety planning guides, legal information, and self-care tips, to help victims navigate their options and find the support they need. Overall, our AI powered one stop platform has the potential to revolutionize the way victims of domestic abuse access support, by providing a convenient, accessible, and personalized resource that meets their unique needs and circumstances. By addressing concerns related to anonymity, fear of retribution, limited access to legal resources, and economic dependence, we can improve the effectiveness of AI-based interventions and provide more comprehensive support to victims of domestic violence in India.

## **DISCUSSION**

### **Implications of The Study**

The findings of this study will have implications for policy and practice in addressing domestic abuse in India. The results will provide valuable information for policymakers and service providers about the challenges and needs of domestic abuse victims and the potential role of AI in addressing these issues.

### **Limitations**

This study has several limitations that should be considered when interpreting the results. First, the convenience sample of participants may not be representative of all domestic abuse victims in India. Second, the data collected in this study will be self-reported and may be subject to biases and inaccuracies. Finally, the study is focused on the potential of AI in addressing domestic abuse, but the effectiveness of these technologies has not yet been fully established.

## **CONCLUSIONS**

The challenges and needs of victims of domestic violence in India. Our survey results demonstrate that the majority of participants believed that AI has the potential to be useful in addressing concerns related to domestic violence anonymously. This finding emphasizes the need for innovative solutions to address the challenges faced by victims of domestic violence in India, and underscores the role that AI can play in addressing this pervasive problem. However, our research also highlights significant challenges that must be addressed to effectively utilize AI-based interventions. Fear of retribution, limited access to legal resources, and economic dependence were reported as major challenges by many of the survey participants. It's imperative to tackle these challenges to guarantee the efficacy of AI-driven interventions and to offer broader support to victims of domestic violence in India.

Our research has important implications for policy and practice. By improving access to resources and support and leveraging the potential of AI-based interventions, we can work towards reducing the incidence of domestic violence and improving outcomes for victims in India. Policymakers, NGOs, and other stakeholders must work together to develop and implement effective interventions that address the unique challenges faced by victims of domestic violence in India. In summary, this research underscores the potential of AI to address the challenges and needs of victims of domestic violence in India. By working together to address the challenges identified in this research, we can help to create a safer and more supportive environment for victims of domestic violence in India.

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