

Women empowerment in Pakistan: the Offense of Rape Law Amendment effects

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Abstract

Currently Pakistan as the second-worst country in terms of gender parity, where thousands of women are treated as property and undergo sexual violence acts everyday. Due to tough Muslim laws and reputation costs, women fear to report the crimes committed against them. Using difference-in-difference approach I study the effect of the Amendment of the Offence of Rape Law to the Women's Bill passed in Pakistan in 2016 on enforcement of women's right for justice. I find that after women have been provided with a safer environment for reporting sexual crimes committed against them and when state guarantees efficient judgment, women become more confident and gain more trust in institution of law and judicial system and the number of reported sexual violence cases increases.

INTRODUCTION

Pakistan is a rather conservative Muslim country, when women rights often are compromised. According to UN WOMEN, The adolescent birth rate is 54 per 1,000 for women aged 15-19 as of 2017. Moreover, only 20.2% of seats in parliament were held by women as of February 2021. Furthermore, 16.2% of women aged 15-49 years old reported that they had been subject to physical or sexual violence by a current or former intimate partner in the previous year in 2018. Also, women and girls aged 10+ spend 18.8% of their time on unpaid care and domestic work, compared to 1.8% spent by men.¹ In 2022, the World Economic Forum released a report where they placed Pakistan as the second-worst country in terms of gender parity and put it at the 145th spot in a survey of 146 countries, with only Afghanistan being worse. Moreover, fear of retributive violence prevent women from reporting the incidents to the authorities and thus women don't even seek justice for the crimes committed against them due to misogynist laws, which they were subject to until very recently². This problem of women discrimination and women's right neglectation may have severe consequences for the economy as a whole. I study the effects of the new legislation - Criminal Law Amendment (Offense of Rape) implemented in Pakistan in 2016 which introduced harsher punishments for the perpetrators of such crimes and which made it safer for women to report the crimes to achieve justice to see if it did succeed in protecting women and increased the number of cases of sexual violence that actually have been reported. This work is organized as follows: first, I briefly introduce the history of women-related legislation in Pakistan with the focus on sexual violence crimes. Further, I address the existing literature and discuss why women rights matter for development and economic growth of a country. In the next section I utilize difference-in-difference approach and the Judicial statistics data to study the effect of the respected legislation on the rape case filing in Pakistan. Finally, I discuss the implication and the meaning of these changes for further establishment of women rights in the country and the meaning behind the the increase of reporting sexual crimes committed against women.

LAW AND WOMEN IN PAKISTAN

To understand the setting of the study, first it is needed to address the history and development of the laws regarding sexual crimes in Pakistan. First, it is important to un-

¹Source: unwomen.org

²Source: ndtv.com

destand the concept of hudood. Hudood ordinance was first enacted in Pakistan in 1979. Hudood cases were intended to bring Pakistani law into "conformity with the injunctions of Islam" and they included such crimes as kidnapping, sodomy, enticement, attempted rape, conspiracy to engage in prostitution as well as theft and alcohol consumption. The main threat these laws posed was to women as they made it exceptionally difficult and dangerous to prove an allegation of rape, and thousands of women had been imprisoned as a result of the bill. Under the law, to convict someone to a death penalty for committing rape, eyewitnesses evidence of the act of by "at least four Muslim adult male witnesses", about whom "the court is satisfied", that "they are truthful persons and abstain from major sins" were needed. Because of this tough standard, no one has ever been found guilty and stoned to death in Pakistan for rape Kennedy (1996). The law also specifically described the offence of false accusation of adultery or rape either written, verbal or just "visible" with intent to cause harm and without providing four witnesses in support of the accusation before the Court shall be imprisoned for up to two years, whipped of up to 40 stripes, or be given a fine. ³. Thus, the laws made it nearly impossible for women to achieve justice if sexual crime had been committed against them and they themselves would most likely end up in prison if they chose to report the criminals.

Inevitably, the first implementation of these laws caused a lot of controversy and criticism. So, consequently, the parts of Hudood ordinance regarding sexual related crimes were excessively revised in 2006, when The Women's Protection Bill was passed. The bill introduced an entirely new set of procedures governing the prosecution of the offences of adultery and fornication. New legislation removed whipping and amputation as punishments for such crimes and it was stated that women would not be jailed if they were unable to prove rape and that their complaints of rape would not be seen as confession of adultery. ⁴ This new legislation made a huge impact and a great contribution to protection of women's rights. Nevertheless, it was still uncomfortable for women to report the crimes for various reasons, since proving someone guilty of sexual crimes was still hard as procedures were not regulated.

To improve The Women's Protection bill, the new Amendment was then introduced after 10 years in 2016. The new amendment made DNA testing mandatory in rape cases, introduced punishment of 1 year imprisonment in case of sabotaging or disrupting the work of a police officer or Government official and made government officials who were found taking advantage of their official position to commit the act of rape are liable to imprisonment for life. Moreover, anyone convicted of committing a rape of a minor

³Source: wikipedia.com

⁴Source: wikipedia.com

or a mentally or physically disabled person will be liable for the death penalty or life imprisonment. Furthermore, the new legislation assured women's safety in reporting their crimes using technology and creating a safer environment. The new law stated that recording of the statement of the victim or sexual harassment or rape should be done by an Investigating Officer, in the presence of a female police officer, or a victim's female family member and that the trials should be conducted in-camera allowing for the use of video links to record statements of the victim and witnesses, to spare them the humiliation or risk entailed by court appearances. Importantly, the amendment restricted the media from publishing the names or any information that would reveal the identity of a victim, except when publishing court judgements. Finally, sex workers were under protection according to the new amendment.⁵ Thus, the bill provided significantly more safety and guarantees for women in reporting the sexual crimes. This is the law the effects of which I aim to further investigate in this work.

LITERATURE REVIEW

There is a majority of literature studying legislation concerning women's rights, so it is important to highlight some important results to underline the possible consequences of great significance of such laws as the amendments of the rape law introduced in Pakistan. Many papers establish the existence of causality between economic development and women's rights in both directions. Thus, Doepke et al. (2012) highlighted major effects of extending women's rights and outlined three major categories of these rights: property rights, political rights and women's rights over their bodies. The latter involves such aspects as women's access to contraception, the opportunity to make their own family planning choices and others. For instance, studying the effects of providing women with rights over their bodies in the context of polygyny in African countries through the theoretical model with two types of property rights system, where fathers sell their daughters into marriage and where women can choose the partner themselves Tertilt (2006) showed that making her own marital decisions leads to higher savings, lower fertility and higher output per capita. In fact, polygyny ban itself showed to be decreasing fertility by 40%, increasing output per capita by as much as 170% has been established and decreasing the spousal age gap according to Tertilt (2005). Furthermore, Bandiera et al. (2020) showed that vocational training about reproductive health, sex and marriage provided to young girls in Uganda lead to a sharp decrease of teen pregnancy, early entry into marriage/cohabitation and the share of girls reporting sex against their will already

⁵Source: wikipedia.com

four years after the intervention.

There is also a great number of papers connecting institutions, women's rights and development. It's also important to address this scope of literature as courts efficiency and legal justice can also be considered as an institution. A lot of existing work focuses on the institution of property. Geddes et al. (2012) showed that expanding women's economic rights, to own and control their property in particular, resulted in higher relative rates of school attendance by girls, thus improving human capital of the country in general. Moreover, Hazan et al. (2019) showed women having property rights to lead to shifts in household portfolios, to a positive shock to the supply of credit, and a general reallocation of labor toward nonagriculture and capital-intensive industries, thus stimulating innovation and industrialization.

Geddes and Lueck (2002) also advocate for legal institutions protecting property rights, which authors specify to be women's right to own and control property, to enter into legally binding contracts, to litigate, to own and operate businesses, and to own market earnings, strengthen incentives for investment and lead to higher economic growth. There authors distinguished economic rights of a woman from her political rights, which are the right to to vote, hold office, and serve on a jury. Nevertheless, there is also a lot of literature on the importance of gender quotas and electoral laws regarding women's political rights. For example, JONES (1998) indicates that in the Argentine province gender quota laws have shown to be an effective tool to assure the higher percentage of women legislators to be elected. Author also argues women representation in office to be important for advocating for women's rights and standing for women's interest. This is in line with the story of my work, as it was UN Women Executive Director, Phumzile Mlambo-Ngcuka, who hailed the Government of Pakistan's decision to pass the anti-rape and anti-honour killing bills - the law amendment which I consider. Thus, woman gaining more power even in foreign countries can have power over enforcing women's laws and assuring protection of women's rights in developing countries, so granting women with political rights seems to be crucial.

More interesting results about the relationship between generations and transmittance of values were obtained Aslam and Development (2007). Using the Pakistan's data, the author argues that households having better educated women with more independent status discriminate against the education of their daughters less than other households. She thus argues, that female autonomy has positive consequences for child education and the women-headed-households and educated female heads gender-discriminate less than both uneducated female heads and than male heads when it comes to allocating education expenses among kids. This suggests that enforcement of women's right, potentially

leading to higher schooling, can be transmitted into the next generation's education, especially when woman has an authority in the family and has significant level of education herself.

EMPIRICAL ANALYSIS

Data

To estimate the effectiveness of the Law Amendment in 2016 I utilize court data from Annual Judicial Statistics of Pakistan prepared by Law and Justice Commission of Pakistan. The data includes district-wise statistics on different case types, the number of judges, courts' budgets, etc. I use the data on case institution, which is equivalent to case filing and stands for the number of new cases filed in a given district at a given year. This data is available for hudood cases, family cases, rent and narcotics cases, which constitute the data sample utilized further. Hudood cases filing are used as a proxy for the number of reports of sexual crimes against woman and the other types of cases are used as a control group (hudood cases are mostly sexual offence cases and those still are reported in courts as "Hudood"). Moreover, I use the data on the number of judges dealing with each type of cases - this data is also available for each year and district separately. Overall, the sample includes the data on 122 districts in Pakistan from 2006 to 2020.

For collection of control variables on population and population characteristics I use Pakistan National Census 2017 data, that includes population division by sex and area of the districts, which is limited to a smaller number of districts.

Baseline model

To estimate the effect of the new legislation, I use the difference-in-difference approach and estimate the following model:

$$Case_filing_{its} = \alpha + \tau Hudood_{it} \times After_2016_{it} + X'_{its}\beta + \delta_{si} + \gamma_{st} + \sigma_{it} + \epsilon_{sit} \quad (1)$$

where dependent variable is the number of cases of type s (one of four) filed in district i in year t , $Hudood_{it}$ is a dummy variable indicating that the cases refer to hudood crimes and sexual assault crimes in particular, $After_2016_{it}$ is a dummy that equals 1 for cases filed after Law Amendment in 2016 and 0 for cases filed prior to 2016, and X'_{it} is a vector of control variables included in some specifications (Total number of judges resolving

particular types of cases in the courts of a district i in year t and congestion of types of judges, which is calculated as the number of pending cases from previous period divided by the number of judges), δ_{si} is time fixed effects, γ_{st} is district fixed effects and σ_{it} is case type fixed effect. The results for different specifications are reported in Table 1. The intuition behind the choice of controls is the following: one may think that people would be less willing to file cases if they see the courts being heavily congested meaning that cases are resolved very slowly and there are a lot of unresolved cases from previous periods on judges' desks. Also, the more the judges there are in the court, the more likely one's case is going to be efficiently resolved, hence, the number of judges itself can also affect new cases filing.

TABLE I: The effect of Law Amendment on hudood case filing

	Case filing		
	(1)	(2)	(3)
$Hudood_{it} \times After_2016_{it}$	68.88* (41.30)	157.51*** (39.55)	134.83*** (37.89)
Congestion per judge		24.38*** (5.36)	26.45*** (3.43)
Number of judges			52.37*** (7.86)
Year Fixed Effect	Yes	Yes	Yes
District Fixed Effect	Yes	Yes	Yes
Case type fixed effect	Yes	Yes	Yes
Mean Case filing	558.636	558.636	558.636
Observations	3176	3156	3156
Clusters	122	122	122

Note: Standard errors are clustered at district level. The dependent variable is the number of new cases filed of a certain type (hudood, family, rent, narcotics) in district courts of Pakistan in 2006-2020. Regressions include year, district and case type fixed effects. Regression in columns (2) include control variable "congestion per judge", which is defined as total number of pending cases from previous period that judges of a certain type deal with divided by the total number of judges of that type. Regression in column (3) also includes control variable "Number of judges", which is the number of judges in a district dealing with a certain type of cases in a given year.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

From Table 1 we see that the coefficient before $Hudood_{it} \times After_2016_{it}$ are positive for all specification adjustments, suggesting that after Law Amendment was introduced in 2016, more hudood cases were being filed. Thus, we can say that women became more confident in fighting for their rights and that they increased their trust in the institution of court and justice.

Robustness checks

To verify the robustness of the baseline results I run several other specifications adding more controls. In the Pakistan 2017 census there is data on the sex ratio in the district, total population, female population and district area in square kilometers.

TABLE II: The effect of Law Amendment on hudood case filing with more controls

	Case filing			
	(1)	(2)	(3)	(4)
$Hudood_{it} \times After_2016_{it}$	135.58*** (43.00)	135.73*** (42.81)	135.75*** (44.06)	138.29*** (44.42)
Sex ratio	7.99 (6.27)	8.19 (5.92)	27.82*** (9.53)	22.23** (10.18)
Total population		-0.00 (0.00)	-0.00*** (0.00)	-0.00** (0.00)
Female population			0.01*** (0.00)	0.01** (0.00)
District area				0.01** (0.00)
Year Fixed Effect	Yes	Yes	Yes	Yes
District Fixed Effect	No	No	No	No
Case type fixed effect	Yes	Yes	Yes	Yes
Mean Case filing	668.186	668.186	668.186	668.186
Observations	2291	2291	2291	2291
Clusters	85	85	85	85

Note: Standard errors are clustered at district level. The dependent variable is the number of new cases filed of a certain type (hudood, family, rent, narcotics) in district courts of Pakistan in 2006-2020. Regressions include year and case type fixed effects. Regression in columns (1) includes control variable "sex ratio", which is defined as the number of males in the district divided by the number of females. Regression in column (2) includes "sex ratio" and "total population" variable, which is the total number of people living in the district. Regression in column (3) includes also "female population", which is the number of females living in the area. Regression in column (4) includes all other controls and "district area", which is the area of the district in square km

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

One might argue that the difference in case filing in different districts can be attributed to the difference of population of the districts as if there are more people in the district, there simply will be more crimes and more case filing and that can distort the result. Hence, I take the population census data of Pakistan as on 2017 (latest available). I include these controls one by one in the baseline model to test for robustness.

However, since this data is fixed on the 2017 level, I omit district fixed effect and

reestimate the following modification:

$$Case_filing_{its} = \alpha + \tau_1 Hudood_{it} + \tau_2 After_2016_{it} + \tau_3 Hudood_{it} \times After_2016_{it} + X'_{its}\beta + \delta_{si} + \sigma_{it} + \epsilon_{sit} \quad (2)$$

The results of the estimates of equation 2 are reported in Table 2 above. We again see the positive sign before the variable of interests in all sub-specifications, suggesting that our results are robust to estimates with more controls.

Event Study

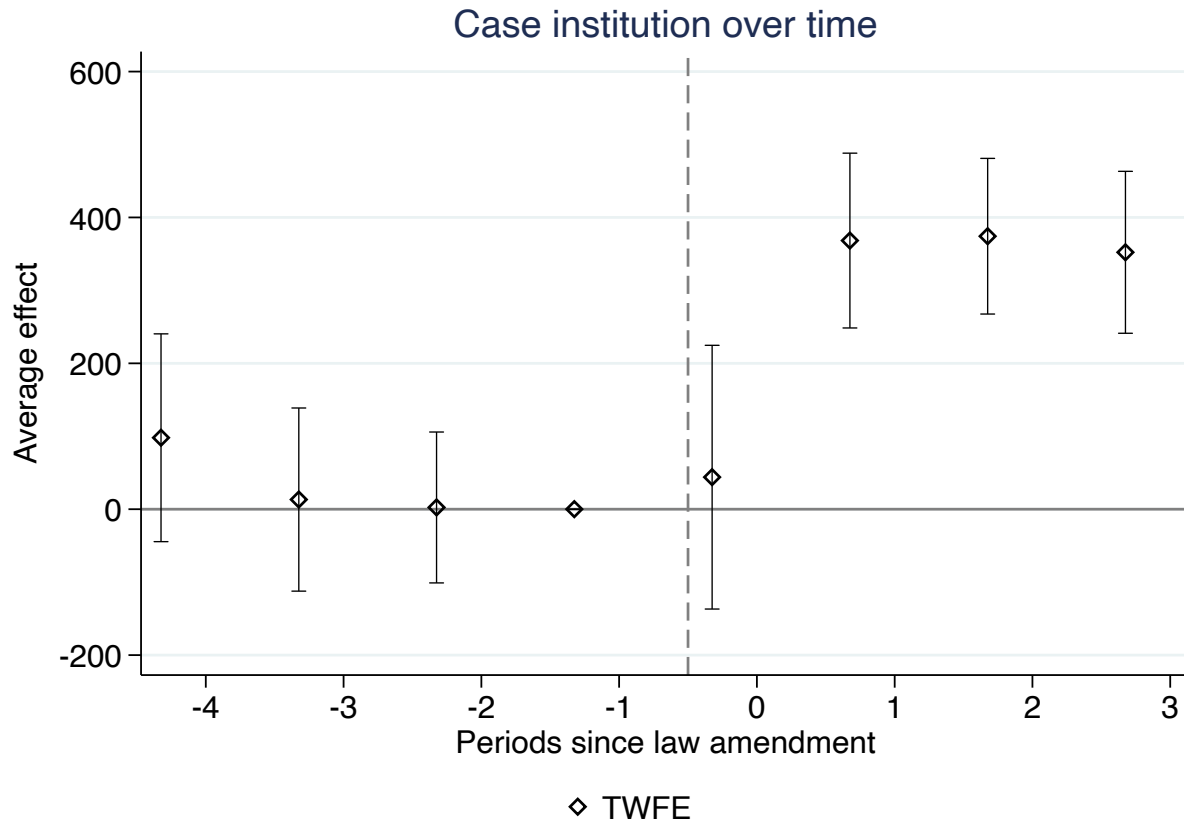
In order to test for parallel trends and study the dynamic effect of the implementation of the legislation in 2016, I also estimate an event-study version of the TWFE model with indicators for time to and from the actual treatment. Specifically, I estimate the following specification:

$$Case_filing_{it} = \alpha + \sum \beta_k \times D_k + \delta_i + \gamma_t + \epsilon_{it} \quad (3)$$

D is a set of indicator variables that take the value one if case filing was k years away from treatment year. The subscript "k" serves as a time index that represents the year of the case filing. For example, when "k" is equal to +2, it corresponds to case filing observed two years after the treatment. When estimating the model, I treat one year before 2016 as the omitted category and compare it to case filing in the other years.

In Figure 1 we see that lags are insignificant as the coefficients are close to zero and confidence intervals intersect with 0, meaning that parallel pre-trends assumption holds, while we see leads being significant and we see the effect being minor in the beginning of post-treatment period and being steadily higher in the following periods.

Figure I: TWFE Event Study



CONCLUSION

I show that the introduction of the 2016's Amendment act to the Women's Protection Bill in Pakistan, which introduced harsher punishment for rape and granted women guarantee of unharmed reputation increased the number of sexual assault case filing. Moreover, this effect is persistent and after 3 years post the implementation of the new legislation, significantly more cases are being filed. My work contributes to the literature on women's rights, development and institutions. Women gain more trust in the institution of Justice and thus acquire more rights in protecting themselves, making a step towards gender equality in male-dominated Muslim society. This is a big step for women of Pakistan and for country's development in general. Women's right over their bodies and integrity has shown to have been strengthened by the discussed law amendment. These rights women possess over their bodies can be associated with such factors as higher savings, lower fertility and higher output per capita as shown in the previous

literature. Moreover, this law and higher case filing implies higher awareness of women's rights and women's awareness about their place and value in society, which potentially leads to higher levels of sex education as well as knowledge about family planning, which in turn can be associated with lower levels of teen pregnancy and an increase in a years at which women are getting married. Consequently, it may increase female schooling and thus labour force participation as well as country's human capital. Therefore, we see two effects of the implementation of a new rape offence legislation: stronger institutions and reinforcement of women's right, a right to their body in particular, which both potentially have a positive effect on country's further development.

Unfortunately, Pakistan's population characteristics data on education, female force participation and households is currently limited, but possible directions for further research are directly studying the effect of women protecting laws on the years of schooling, family planning, women's fertility and even women's bargaining power in the family. Other than that, long-term effects of this policy may be rather interesting, as it forms a new generation of women with different beliefs, who know and own their rights and who are now protected by justice. Therefore, it would be interesting to see how this values are transmitted into the next generation and which values in particular the mothers would form for their young daughters. It would be interesting to look at a surveys conducted in a few years in a future to see how the perception of justice, family and education change in a long run after the respected policies have been implemented. Finally, having the data on actual committed sexual crimes against women would give more insights about the effectiveness of the law in terms of actual commitment of crimes rather than women's rights and empowerment.

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