Factors affecting mental health status of the abortion clients' in India: A facility based study

Introduction: In India, abortion is permissible, on the ground of mental health of the women (MTP Act, 1971). However, the critics of liberal abortion legislation have pointed out that granting abortion for reasons of mental health is vague and constitutes a way of justifying abortion on demand. Some have pointed out that induced abortion contributes to the prevention of mental illness by reducing the incidence of post partum psychosis and by reducing excessive population growth, which adversely influences human well-being. From long back, psychologists have tried to identify whether there are any subjective differences between the women, who wished to abort or who did not. Some found that the quest for abortion is a rejection of the maternal role, as conflict with parents has also been cited as a motive for unwanted pregnancy and subsequent abortion among unmarried adolescents. Some studies could not find any convincing evidence that women who sought abortion were psychologically different from those who did not. Generally, a higher proportion of women who sought abortion after third month of pregnancy were found to be mentally disturbed. This is partly because late abortion requires a more complex medical procedure. Ambivalence in the decision to seek termination can cause feelings of guilt and regret. Women, who were forced to renounce a pregnancy because of external social and economic circumstances, were found to be more at risk of guilt feelings or depression after abortion and adolescents are more likely than adult women to be adversely affected by abortion (Figa-Talamanca, 1981). A recent study shows that four weeks after having an abortion, there was no statistically significant difference between minors (women younger than 18 years) and older (more than 18 years of age) women in standard tests measuring depression, emotional state, self esteem, anxiety and state of mind (Pope, Adler and Tschann, 2001). When the pregnancy is desired, but abortion is indicated for medical reasons (either maternal or foetal), the women are apt to react with a feeling of depression and guilt. Studies also reveal that distress and depression levels were comparatively higher before the abortion and significantly lower as the days passed (Lin et al, 1999; Pope, Adler and Tschann, 2001). However, some researchers have observed that even after passage of time, a few women felt sorry, guilty or repentant (Major B. et al, 2000; Divekar, Natarajan and Purundare, 1981). Abortion is a very sensitive issue and its legality depends on the perception of the government about the population. However, after the 1994 International Conference on Population and Development (ICPD), “women’s right to post abortion care” became a global issue. As Figa-Talamanca states “attitudes toward abortion throughout the world are changing so rapidly that even relatively recent studies no longer reflect the social and psychological climate surrounding abortion today” (Figa-Talamanca, 1981).

In India very few abortion literatures focus on mental health status of the abortion clients. A hospital based case control study conducted in New Delhi found that women having an induced abortion had higher neuroticism than women in the

spontaneous abortion group. It appears that respondents with high neuroticism scores prior to the procedure showed a gradual improvement with the passage of time. Feeling of guilt is very common between both groups of women. In general, psychological outcomes may be related to many factors such as parity, number of previous abortions, period of gestation, planning of pregnancy and abortion, marital, social and occupational adjustment, the effect of hospitalization, a woman's attitude and that of her family and the health personnel towards abortion, fear of the procedure, previous psychological status, factors such as age, literacy, marital and socio-economic status, type of family (nuclear or joint), number of living male children, etc are also reported to influence the psychological outcome of abortion (Bhatia et al., 1990). Another hospital based study in Mumbai found that after 20 days of MTP, a majority of married and married women felt relived, but a small percentage of women felt sorry, guilty or repentant (Divekar, Natarajan and Purundare, 1981). Mandal's study on 100 unmarried MTP seekers reveals that the liberalization of abortion and the fairly satisfactory level of confidentiality and safety that the hospital ensures have removed the natural fear that would have otherwise accompanied the women (Mandal, 1982).

However, most of these researches have studied mental health status of the abortion clients, without controlling many other important social and psychological factors which might have very strong impact on the mental health status of the abortion clients, like reason for abortion, decision making autonomy in seeking an induced abortion, spousal support received for obtaining an induced abortion, satisfaction with the service quality received from the abortion provider; hence, this study aims to deal with mental health status of the Indian abortion clients in the context of their physical, social and psychological background. It has also been hypothesized here that women those who sought for abortion services have poorer mental health status than those who already received abortion services.

Conceptualization

The issue of decision making to terminate pregnancy has been studied here by two indicators i.e., the reasons for terminating the pregnancy and the women's involvement in the process of decision making. If a woman is pressurized to opt for an induced abortion in against of her wish, then she may suffer from psychological disorders due to suppressing her wish within herself, even unknowingly. Literature shows that ignorance and inability to take a quick decision about an unwanted pregnancy compel a large number of women to seek abortion in second trimester from (Gupta et al., 2000). Obviously, late abortion has significant affect on the mental health status of a woman, as after carrying a pregnancy quite some days, termination of that foetus leaves trauma on a woman. Apart late abortion has strong negative consequences on physical health status of a woman. Even a woman may face objection to obtain a MTP at her higher gestational stage, which may leave negative consequences on her

mind. Hence, the phase of service seeking by the MTP clients (i.e., whether she already obtained MTP or not) has been considered her. Since some studies have indicated that spousal supoort has strong influence on women's post abortion quick recovery (Abdel-Tawab et al, 1999) so spousal support has been considered here as a predictor of mental health status of the abortion clients.

Again, women who have had an abortion may need help in handling the emotional and psychological response to the experience. Some women may be worried or anxious about how they will be treated by family, friends and the community after their recovery. Hence pre and post abortion counseling is very important to psychological support. So, this study considers that if the abortion client was satisfied with the behaviour of the service she received she might have better mental health status than those who were not satisfied with the quality of service they received. Again, as it is very common in Indian medical setting that coercion of the MTP service providers to the MTP clients for either opting for sterilization or adopting copper T (Jamshedji and Kokate, 1990; Khan et al., 1990; CORT, 1997), this forceful adoption of contraception obviously may have detrimental effect on the mental health status of the abortion clients. Appendix 1 shows the conceptualization of the present study.

Methodology

Data: National Family Health Survey (1998-99) report indicates that the induced abortion rate among ever married women in the state of West Bengal (2.2) is slightly higher than that of national level (1.7) (IIPS, 2000). An estimation from NFHS-2 data reveals that in the city of Kolkata six percent of total pregnancies terminated as induced abortions, which is as high as in the capitals of other two abortion prone states like Delhi (abortion rate is 5.1 per cent in Delhi metropolitan) and Tamil Nadu (abortion rate is 6.6 per cent in Chennai metropolitan). Hence, Kolkata has been selected as the study area for the present research.

The study is carried out mainly with primary data collected from three medical health facilities in Kolkata, namely Calcutta Medical College Hospital, Nilratan Sarkar Medical College Hospital and Parivar Seva Sanstha (Ballyganj/south). In the year 2002, 58 health facilities were officially permitted to medically terminate pregnancies (MTP) in Kolkata. Among them, 19 health facilities were run by the government or by the Municipal Corporation. Of these, five were training institutes. The rest of the health facilities (39) were other hospitals, mainly run privately or by NGOs. In this study, selection of health facilities was based on the MTP performance (during April to August 2002) as recorded by the District Family Welfare Bureau, Kolkata. This MTP performance record shows that highest number of MTPs were conducted in Ballyganj Parivar Seva Sanstha (PSS). Among the government health facilities (recorded) MTP performance was highest in Calcutta Medical College Hospital and Nilratan Sarkar (NRS) Medical

College Hospital comes next. The share of these facilities was 47 percent of total MTP performance in Kolkata (during April to August 2002)[1].

The required information was collected from interview of MTP clients visiting the facilities on three days (Monday, Wednesday, and Friday) per week continuously for a period of eight weeks in each facility. Thus, in each facility twenty-four were targeted as total interview days. Data was collected in the year 2004 from April to September. The sample covered in the Medical College Hospital was 79, in NRS it was 65 and in PSS it was 91. Time for data collection was from 10:30 A.M to 2:30 P.M. in the out patient department and between 2:30 P.M. to 4:00 P.M. in the inpatient department (rest room).

All women who came during the reference period (for seeking MTP, those who obtained MTP, and women who came for follow up visits after receiving MTP a month prior to the date of interview) to the family welfare department or MTP centres, were contacted and after receiving consent the women were interviewed with fully privacy. Initially, 250 MTP clients were contacted and later 235 women agreed to participate in the interview. Semi structured interview schedules were used in interviewing the MTP clients. The interview schedule was approved by the ethical committee of each of the health facility and also by the ethical committee of the International Institute for Population Science, Mumbai.

Analysis: The finding of this study is based on both bivariate and multivariate analysis of the data. A number of indices have been constructed to carry out the present study. Three indices are: mental health status index, respondents' household standard of living index (SLI), and spousal support index.

Construction of mental health status index

A recent study has documented that somatic and retarded activity; interpersonal relations, depressive affect and positive affect are the main psychological consequences of abortion (Lin et al, 1999). In the present study, 'loss of appetite', 'loss of sleep', 'feeling of short-term anger' and 'loss of confidence' have been conceptualized as symptoms of somatic and retarded activity. Two symptoms namely 'like to make friends' and 'enjoying chatting' have been considered as indicators of interpersonal relations. Depressive affect has been measured by considering symptoms, like 'loneliness', 'inability to concentrate', and 'wish to cry'. Lastly, symptoms, like 'capability of decision-making', 'enjoying normal day-to-day life' and 'happiness', are used to measure the positive affect. To measure the prevalence of each of these 12 symptoms (within the last two days) among the respondents a five-point scale was used (extreme=1, often=2, sometimes=3, rare=4 and never=5). The α value of reliability score of each of the effects are as follows: (1) Somatic and retarded activity = 0.7563, (2) Interpersonal relations = 0.8489, (3) Depressive affect= 0.7627 and (4) Positive affect = 0.7988.

[1] Unpublished data, from District Family Welfare Bureau, Calcutta, 2002.

Further, to construct a scale of mental health status as a whole, equal weight to each of the symptoms of all these effects were given and then the scores of all the symptoms for each of the effects together were added up. It should be mentioned here that if the symptoms determine positive outcomes like 'interpersonal relation' and 'positive affect', then the score was converted in the opposite way (i.e., extreme=5, often=4, sometimes=3, rare=2 and never=1).

This means that total score of mental health status could range between '12 to 60'. Now, on the basis of a quartile distribution, respondents getting scores like (0-29) were considered as possessing poor mental health, those with scores between (30-42) as possessing average mental health, and those with scores between (43-60) were considered as having good mental health.

Construction of Household standard of living index (SLI):
SLI was constructed on the basis of household characteristics of the respondents (i.e., household type, sanitation facility, availability of separate room for cooking, source of lighting, cooking fuel and source of drinking water) and household ownership of durable goods (like car, computer, washing machine, moped/scooter/motor cycle, landline telephone/mobile, water pump, refrigerator, television, bicycle, electric fan, radio, sewing machine, and cot/bed, table, clock, pressure cooker). Appropriate weights were used for each of the 24 items of SLI. Theoretically, total scores could range between 0 and 52. An index score ranging from 0 to 14 is considered as low, 15-28 as medium and 29 to 52 as high standard of living.

Spousal support index:
The present study considers indicators like economic support from spouse for abortion services, spousal awareness of recent conception as well as current abortion, voluntary nature of decision making as well as involvement of both spouses in the decision taking, spouses accompanying women to service centers, spousal consent for MTP, spousal support in choosing any contraceptive by the respondents before conception or post MTP as the indicators of spousal support in obtaining MTP. On the basis of the importance of each of these nine items, weights are given. Theoretically, spousal support index could range between "0 to 12". In the index score falls within (9.0-12.0) it is considered here as good support, from 5.0 to 8.9 as medium support and from 0.0 to 4.9 as poor support.

A one-way analysis of variance (ANOVA) has been carried out, to understand whether there existed any significant relationship between different symptoms of psychological consequences and patient type. To identify the factors affecting mental health status of the MTP clients, multiple regression analysis has been carried out, considering score of mental health status as the dependent variable.

Who Possesses Poor Mental Health Status?

As the question of psychological consequences before and after getting an abortion services has come from abortion literature, it is therefore a basic query to know who are having poor mental health status: those who are seeking abortion services; or, those who had already obtained it? The present part of the chapter aims to examine the differences in mental stress between MTP clients (according to their type of service seeking; i.e., whether, they had already obtained the services, or recently obtained it or they were looking for MTP services) in terms of each symptom of psychological consequences mentioned earlier.

It reveals from table 1 that F value of ANOVA test is significant for indicators like 'losing appetite', 'loss of sleep', 'enjoy chatting', 'feeling lonely', 'inability to concentrate', 'wish to cry', 'reasonably happy' as well as mental health status as a whole. This indicates that these indicators are the very sensitive psychological symptoms, by which a woman who already received MTP services reacts in a significantly in different way than a woman who sought the MTP services, but did not obtain it.

Table 1 also shows the mean value of different symptoms of each indicator of psychological consequences. It was found that the mean value of all symptoms of somatic or retarded activity is lowest among the MTP seekers, than MTP patients or follows up service seekers. This indicates that women who had not obtained MTP at the time of interview, but were seeking MTP, had suffered from a higher level of somatic or retarded activity, than those who already obtained MTP. From table 1, it can also be seen that in case of losing sleep or losing appetite, women who already obtained MTP significantly react in a different way than those who had not obtained it.

Further, the mean value of the original score (extreme=1, often=2, sometimes=3, rare=4 and never=5) of two symptoms of inter-personal relations reveal that MTP seekers scored comparatively higher than MTP patients or follow up service seekers. This means that compared to women who already obtained MTP services, a higher proportion of women who were seeking MTP services to terminate a pregnancy, generally withdraw themselves from inter personal or social activity (table 1). It is also noticed that a significant difference existed in enjoying chatting among these groups of women.

Similarly, symptoms of depressive affect reveal a lower mean value for the MTP seekers compared to the other women, an indication of the poor state of mind among the MTP desiring women, than those who already obtained MTP. Finally, a higher mean value of different symptoms of positive affects among the women who desired MTP is representing their least optimistic nature, than the women who had already obtained MTP services (table 1). Moreover, it can also been observed from the same table that the mean value for two symptoms of somatic or retarded activity, like 'experience of short term anger' and 'losing self confidence' is comparatively higher among the MTP patients than among MTP

follow up service seekers. This indicates that a comparatively higher proportion of MTP patients reported that they had little short-term anger and had a better level of self-confidence (within the last two days) than the follow up service seekers. It might be that the sudden feeling of getting rid from an unwanted conception had improved their level of self-confidence and they felt relaxed. Therefore, a higher proportion of them reported a lack of short-term anger than other women. Again, the lowest mean value of two other symptoms of positive affect, like 'able to enjoy normal day to day life' and 'reasonably happy' among the MTP patients indicates that, in general, women just after MTP become optimistic in nature.

Lastly, for mental health status as a whole, the mean value is comparatively higher for the MTP follow up seekers, and lower value for the MTP seekers. The mean value of mental state as a whole for MTP patients falls between the mean score of these two groups of women. This indicates that before obtaining MTP services, in general, women possessed poor mental health, but with the passage of time after obtaining the MTP services, their mental health status generally improves (table 1).

Mental Health Status of the Respondents according to their background characteristics

From bivariate analysis it has been found that in general, one fourth of MTP clients possessed poor mental health, 46 per cent of them possessed average mental health and the rest were having good mental health (figure 1). A brief profile of the respondents has been documented below according to their mental health status:

Background profile of women: A significant variation in the mental health status has been noticed among the respondents according to their age group. Comparatively, a higher proportion of adolescents (43 percent) reported having a poor level of mental health; while a higher proportion of adult women in any age group possessed average mental health. Variation in the state of mind by marital status of the respondents is highly statistically significant. Around 71 percent ever married women and around 63 per cent never married women possessed poor mental health. On the contrary, only 19 percent currently married women reported having poor mental health at the time of interview. Mental health status of respondents also significantly varies according to parity of the women. The half of the nulli para women possessed poor mental health, while a higher proportion of single parity women possessed either average or good mental health status. Among women who were having two or more children, a majority possessed average mental health (54 percent). However, considering sex composition of previous child/children no significant variation has been noticed in mental the health status of the married women.

With the improvement in educational level, a considerably higher proportion of respondents' mental health status also improves. While, one third of illiterate women possessed a poor state of mind, there, a little less of one fifth of women who had completed high school or above education possessed poor mental health. Considering husband/partner's educational status, a mixed picture has been noticed. A significantly higher proportion of women (43 per cent) who did not know their spouse's educational status possessed poor mental health. Among women whose spouses were illiterate or less educated (literate but did not complete middle school education) a considerably higher proportion possessed poor level of mental health. Whereas, women whose husbands/partners had completed middle school or high school or above educated respectively, 41 percent and 39 percent of them reported having better mental health status.

A significantly higher proportion of currently working women possessed good mental health status than the women who were not working. Moreover, a higher proportion of currently married women whose husbands were unemployed possessed poor mental health status (40 percent). Looking at household standard of living, it was found that as household standard of living improves, mental health of the respondents also improves.

A significantly ($p< .001$) higher proportion of women who were currently staying at their husband's house, possessed good mental health than those who stayed in their parental homes or in other places. Specifically, six of nine women who were staying in others' homes were having a poor level of mental health. The currently married women those who resided with their husbands possessed significantly better mental health status than those who did not.

Mental health status of the respondents also significantly varies according to their religion. A significantly higher proportion of muslim women (43 percent) possessed poor mental health status than hindu women (22 percent). However, no significant variation in mental health status of the respondents by their place of residence (rural/urban) is noticed. In addition, a significant variation is also visible in the mental health status of the respondents in terms of exposure to different kinds of mass media. Among women who were exposed to newspapers at least once a week or go to cinema/theatre at least once in a month, a considerably higher proportion had good mental health status ($p<. 05$); whereas, variation in mental health status due to exposure to radio or television is not much significant.

Abortion Decision Making: A significant variation in the mental health status of the MTP clients can also be observed by considering the persons who mainly took the decision to terminate a pregnancy. If respondents, mutually with their spouses, decided to terminate the pregnancy then it appears that the women did not feel mentally troubled by that activity. In most of the Indian families, the husband is the sole decision maker, and if husband alone takes the decision,

then women do not bother much. On the contrary, if the decision for termination of a pregnancy is taken by a woman herself, then she might face some objection from the family or spouse. Sometimes a woman may not disclose even the news of conception to her spouse or family and this kind of situation may have negative impact on a woman's mind. It is found that a significantly ($p < .001$) higher proportion of women who decided to opt for MTP on their own possessed a poor level of mental health (28 percent), than women whose husbands took the same decision (19 percent) or those who mutually decided to opt for MTP with their spouses (13 percent). Further, it was also observed that among women whose decision about abortion was taken by other persons (like mother in law, mother, sister, etc), around 61 per cent possessed a poor level of mental health. This indicates that the lack of spousal involvement in decision making to abort (one of the major reproductive decisions) has an adverse impact on a woman's mental health. Also, it was found that more than half the women who opted for MTP because their pregnancy was illegitimate or they were unmarried (and had no chance to getting married in the near future) possessed poor level of mental health. A significantly higher proportion of women who resorted to MTP due to family planning or economic reasons, possessed average level of mental health status. A higher proportion of women, who obtained MTP due to other reasons, possessed a poorer level of mental health than women who opted for MTP due to family planning or economic reasons.

Spousal Support: Just as women who were obtaining better spousal support had better post MTP physical health status, it was also observed that better spousal support is conducive to have a good level of mental health. Better mental health status has been observed among 53 percent respondents who received high level of spousal support while only 28 percent respondents who received average level of spousal support or 6 percent respondents who received poor level of spousal support had better state of mental health ($p <. 001$).

Physical Health: it is also noticed that the variation in the mental health status of the respondents, according to different indicators of their physical health. As gestational duration at seeking MTP increases, mental health status of the respondents significantly deteriorates ($p <. 001$). Only 12 percent of the respondents who sought MTP services during the second trimester of pregnancy possessed good mental health while among the women who obtained MTP services during first eight weeks of pregnancy 38 percent of them had good mental health status. The reason might be that taking the decision to terminate the pregnancy at a higher gestational stage might be very difficult for the respondents. In some cases, though respondents wanted to terminate the pregnancy, but the provider refused MTP services at a late gestational stage. This type of a situation creates a dilemma in a respondent's mind and might have negative psychological consequences on a respondent's mind. However, considering the experience of repeat abortion, no significant variation in mental health status has been noticed among the respondents. Since, physical complications may have direct relationship with one's mental health status; both

immediate as well as delayed post MTP physical complications have been taken into consideration in studying the mental health status of the respondents. In both these cases, it is evident that a higher proportion of women with better physical health status were significantly enjoying better mental health status than their counterparts.

Quality of Care: Quality of abortion counseling (from respondent's view), and respondent's satisfaction level have been considered here as indicators of quality of care. The mental health status of the respondents significantly varies with their satisfaction level. None of the respondents, who were dissatisfied about the quality of service offered by the facility, possessed good mental health status, while a considerably higher proportion of respondents (32 per cent) who were satisfied about the services in the facility enjoyed better health status. Again, a significantly higher proportion of respondents, who reported poor quality of abortion counseling, possessed poorer mental health than those who reported that they received average or high quality of abortion counseling. Mental health status of respondents also significantly ($p < .10$) varies with the acceptance of post abortion contraceptives. Comparatively, a higher proportion of respondents who did not intend to accept a modern method of post abortion contraceptives, or, those who accepted it (or ready to accept it) because of pressure from the provider possessed poor level of mental health (27 percent) than those who had decided to accept a method earlier (16 percent) or were convinced to accept a method by the service provider of the facility (18 percent).

Factors associated with mental health status of the respondent: A Multiple regression analysis

As a bivariate analysis cannot control the effect of all plausible factors on the dependent variable; a multivariate analysis is required to examine the effect of all predictor variables on the dependent variable. Since, the dependent variable here (i.e., mental health status) is based on total score of different symptoms of psychological responses as a whole, which is very continuous in nature, a multiple linear regression analysis could be considered as suitable to study this aspect. A series of independent variables are included in the regression model, which are: age of the women, marital status, educational status, household standard of living, spousal employment status, religion of the women, reason for obtaining MTP, decision maker of MTP, spousal support, duration of pregnancy, stage of service seeking (i.e., pre abortion service seeking or post abortion service seeking), women's satisfaction about the service they received, and intention to adopt post MTP contraception (modern method).

Table 2 presents the results of the multiple regression analysis. It has been observed that after controlling the effects of all the independent variables, duration of pregnancy and women's satisfaction about the service they received have the most significant impact ($p<. 001$) on the mental health status of the MTP clients. An increase in one-week gestational age inversely affects the (total

score) mental health status of MTP clients by 0.28 units. Again, dissatisfaction with the MTP services affects the mental health status of the women by 0.26 units. Further, household standard of living has a significant positive impact on the mental health status of the women (p<. 050); whereas, spousal unemployment has a significant association with the mental health status of the women. The regression analysis also indicates that if the decision to terminate a pregnancy is taken by persons other than the spouse it has a significant inverse impact (p<. 100) on mental health status of the women. Moreover, if the termination was specifically due to other reasons, then also it seems to have significant inverse impact on the mental health status of the MTP clients.

However, no significant impact of age, marital status, educational status of respondent, religion, spousal support, stage of service seeking and acceptance of post abortion contraception on mental health status have been found in the regression model.

Conclusions

It reveals from this study that around one fourth of the MTP clients possessed poor level of mental health at the time of interview, though bivariate analysis indicates significant differences between the pre MTP seekers and post MTP seekers in terms of their mental health status. However, after controlling the effect of other factors in the multivariate analysis, no significant association between stage of service seeking and mental health status of the respondents could be found. The study reveals that mental health status of a MTP client is mainly influenced by gestational duration of pregnancy at the time of seeking MTP services. Earlier studies also have shown that late abortions are likely to have inverse psychological consequences (Fiza-Talamanca, 1981; Bhatia et al, 1990). Dissatisfaction with the quality of service received by the respondents from the facility has great impact on their mental health status. This indicates that negligence or rude behaviour of the providers or the use of force by the provider to adopt a post MTP contraceptive ultimately harms the mental health status of the MTP clients. A significant association between mental health status and household standard of living as well as spousal employment status reveals that economic circumstances make women more mentally vulnerable than the question of abortion. Further, the study indicates that the lack of decision-making power in reproductive life has an inverse impact on women's mental health status; especially when people other than the spouse take the main decision to terminate a pregnancy (p<. 100).

It can be reasonably concluded that the mental health status of the women mainly depends on their MTP service seeking behaviour, i.e., why and when they are going to opt for a MTP; and after accessing the service, whether they are satisfied with that service or not. Lastly, economic background of the family and reproductive decision-making autonomy have an influence on a MTP client's mental health status.

Lastly, the study advocates for improving

1. Quality of abortion care, especially quality of counseling
2. Involvement of male counterparts as support giver at the time of MTP
3. Awareness about the real timing for seeking MTP and to improve their awareness about the selection of real abortion service providers by intensive IEC program.

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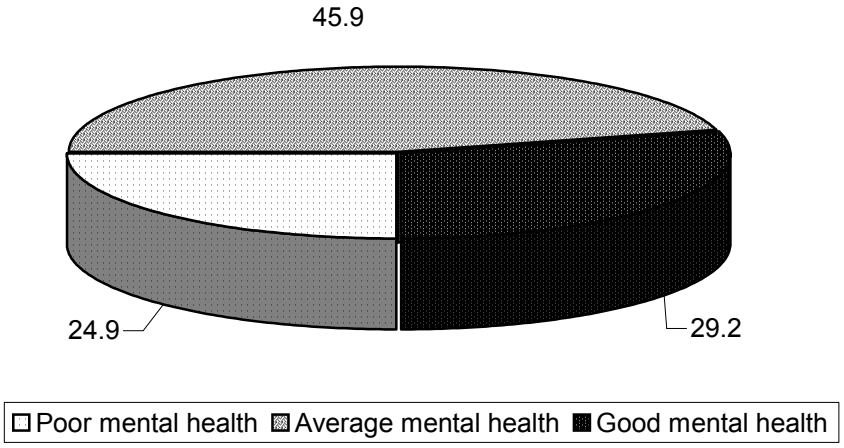
Table 1: Mean and standard deviation of different indicators of mental state by type of patient

Indicators of mental state		MTP seekers	MTP patients	MTP follow up service seekers	F
SOMATIC OR RETARDED ACTIVITY	**Losing appetite**				4.881
	Mean	2.80	3.05	3.39	
	SD	1.24	1.14	1.08	
	Losing sleep				
	Mean	3.02	3.42	3.56	3.287
	SD	1.44	1.38	1.44	
	Experience of short-term anger				1.875
	Mean	2.63	2.91	2.73	
	SD	0.98	0.87	0.87	
	Losing self confidence				1.611
	Mean	2.98	3.21	3.17	
	SD	0.95	0.90	0.81	
INTERPERSONAL RELATION[1]	**Like to make friendship**				1.682
	Mean	3.18	3.00	2.98	
	SD	0.83	0.74	0.66	
	Enjoy chatting				3.015
	Mean	3.08	2.85	2.75	
	SD	0.97	0.86	0.84	
DEPRESSIVE AFFECT	**Feeling lonely**				7.044
	Mean	3.31	3.42	3.93	
	SD	1.10	1.05	0.94	
	Unable to concentrate				3.486
	Mean	3.27	3.26	3.53	
	SD	0.68	0.88	0.73	
	Wish to cry				4.156
	Mean	3.22	3.39	3.66	
	SD	1.04	0.89	0.80	
POSITIVE AFFECT[2]	**Capable of making decision**				1.520
	Mean	3.22	3.05	3.02	
	SD	0.91	0.79	0.73	
	Able to enjoy normal day to day life				2.860
	Mean	3.28	2.98	3.08	
	SD	0.86	0.73	0.82	
	Reasonably happy				5.086
	Mean	3.22	2.82	2.85	
	SD	1.02	0.80	0.91	
Score for total state of mind[3]					
Mean		34.4	37.4	38.5	5.411
SD		8.9	7.6	7.8	
Sample size		**108**	**66**	**59**	**233**

Table 2: Factors affecting mental health status of the respondents: Multiple Regression Analysis

Characteristics of women	Reference category	Standardized β
Age		
Less than 20 years	Less than 20 years	
20-29 years		-.120
30 years or above		-.105
Marital status		
Currently married	Currently married	
Other women		-.129
Educational status		
Illiterate	Illiterate	
Literate, < middle school completed		.125
Middle school completed		.129
High school completed or above		.040
SLI		
Low	Low	.089
Medium		.188**
High		
Spousal employment		
Yes	Yes	
No		-.127**
Don't know/other		-.091
Religion		
Hindu	Hindu	
Muslim		-.104
Reasons for abortion		
Family planning	Family planning	-.029
Economic reasons		-.093
Pregnancy due to illegal relation/unmarried pregnancy		-.106*
Other		
Decision maker		
Respondent	Respondent	-.048
Husband/partner		.021
Both spouse		-.128*
Other		
Spousal support score (continuous)		.133
Duration of pregnancy (continuous)		-.281***
Patient type		
Pre abortion	Pre abortion	.509
Post abortion		
Satisfaction with the service received		
Yes	Yes	-.259***
No		
Acceptance of post abortion contraception		
Yes	Yes	-.093
No		-.040
Not yet decided		
Adjusted R^2		.474
Total sample size		233

Figure 1: Percentage distribution of total women according to their mental health status



APPENDIX-1: Conceptual Framework