CHAPTER V

SUMMARY, MAJOR FINDINGS OF THE STUDY, DISCUSSION, CONCLUSION, IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter contains a summary findings of the study, discussion, conclusion, implications to nursing, limitations and recommendations for future study.

SUMMARY:

The purpose of the present study is to find out the effect of planned intervention on the grief and coping strategies of mothers of children with selected chronic diseases admitted in selected hospitals of Pune City.

The objectives of the present study are thus following:

- To assess the perception of grief of mothers of children having selected chronic diseases before and after planned interventions in the experimental group
- To assess the coping strategies of mothers of children having selected chronic diseases before and after planned intervention in experimental group.
- To assess the perception of grief and coping strategies of mothers of children with selected chronic disease in control group
- To correlate the findings with selected demographic variables.
- To assess the opinion of mothers regarding planned intervention.
HYPOTHESIS:

- $H_{01}$ – There is no significant difference between the perception of grief of mothers of children with selected chronic diseases of experimental group and control group at 0.05 level of significance.

- $H_{02}$ – There is no significant difference between the coping strategies of mothers of children with selected chronic diseases of experimental group and control group at 0.05 level of significance.

- $H_1$ – There is significant difference between the perception of grief of mothers of children with selected chronic diseases of experimental group and control group at 0.05 level of significance.

- $H_2$ – There is significant difference between the coping strategies of mothers of children with selected chronic diseases of experimental group and control group at 0.05 level of significance.

SCOPE OF THE STUDY:

This study highlights simple relaxation therapy and information booklet and their effects to

1) Provide scientific knowledge to the field of Nursing.
2) Provide independent nursing diagnosis and intervention.

3) Provide a new pathway for future researchers in to independent nursing interventions on different medical conditions.

4) Give a sense of satisfaction to nurses in providing care to their patients and care takers.

ASSUMPTIONS:

The study was based on the following assumptions:

- Mothers whose children are suffering from leukemia and Thalassemia have various types of grief
- Mothers whose children are suffering from leukemia and Thalassemia use some coping strategies

VARIABLES UNDER STUDY:

The planned interventions and background variables were considered as independent variables. The perceived grief and coping strategies were considered as dependent variables.

Purpose of the study:

Nurses spend a large amount of time taking care of patients. Giving information regarding how to take care of the child and bio behavioral interventions such as relaxation therapy are inexpensive, feasible and can be easily thought by nurses to the mothers of children who have chronic illness. These interventions may provide a sense
of inner self control that will help patients and care takers to cope with the grief experience because of their child’s disease condition.

Methodology:

The study has made the use of quasi experimental design. The study was conducted in four settings. The sample consisted of 120 mothers of children suffering from leukemia or thalassemia were taking treatment from the selected four setting during the data collection period, and those who fitted the sampling criteria.

Data collection Instruments:

The researcher prepared data collection instruments, including Demographic variable Performa, Grief assessment scale, coping strategy scale, and opinion scale. Validity and reliability has done before using the instrument for data collection. Data collection was done from March 2013 to November 2013.

Both descriptive and inferential statistics were used for data analysis. Frequency and percentage were calculated for describing demographic variables, level of grief coping strategies used and opinion regarding planned intervention. Mean and SD were calculated in the area of coping strategies. The data was analyzed using ‘Z’ test and two sample ‘Z’ test. Fisher’s exact test was used to find out the association between the grief and coping strategies reported with selected demographic variables.
Major findings of the study:

Demographic variables:

It was observed that there was almost equal distribution in number of children, diagnosis, duration after diagnosis, age of the child, gender of the child and occupation of the mother in experimental and control group.

The finding suggests that 50% of the mothers have two children in the experimental group and 56.7% of the mothers have two children in the control group. 50% of the children diagnosed with leukemia and another 50% of the children diagnosed with Thallasemia in experimental and control group. 48.3% of the children in the experimental group, duration of illness were 0-1 year and 40% of the children in the control group duration of illness were 0-1 year.

It was observed that 58.3% children were in the range of 4-8 years in experimental group and 45% of children were in the range of 4-8 years in the control group. Regarding the gender of the child 56.7% were male child in experimental group and control group. 75% percentage of the mothers in experimental group was non-working mothers (House wife) and 76.7 of the mothers in control group were non-working mothers (House wife).
Perception of grief of mothers of children with selected chronic disease:

The overall grief, its subscale and effect of interventions on grief were computed using frequency, percentage, mean, SD, ‘Z’ value and two sample ‘Z’ value. The pre intervention grief score revealed that 80% of the mothers of children with selected chronic disease were having severe grief. After the intervention 85% of the mothers were in moderate grief and no one was there in the severe grief. This finding clearly indicates that intervention resulted in significant reduction in the intensity of grief. Exposure to a grief over a period of time will reduce its impact on the subject. It was observed that grief did reduce for the control group even without any interventions. However they reduced even more significantly for the experimental group with interventions. This indicates that interventions added to the reduction of stressors.

The grief experience inventory was consisting of four subscales, i.e. Existential concern, tension and guilt, depression and physical distress. Analysis was done separately to find out which area of grief is used by the mothers of children with selected chronic diseases. The frequency and percentage were calculated on the four areas of grief. Findings of the study shows that in experimental group the pre-intervention mean score of existential concern area is 15.2 with SD of 2.96, and the post-intervention mean score is 5.1 with SD of 0.81. The pre-intervention depression mean score was 13.3 with SD of 2.81 and post-intervention mean score was 6 with SD of 0.97. The pre-intervention guilt mean score was 11.3 with SD of 3.01 and post-intervention mean score was 10.4 with
SD of 0.98. The pre-intervention physical distress means score was 12.3 with SD of 2.22 and post-intervention mean score was 6.1 with SD of 0.98.

The data shows that in control group the pre-intervention mean score of existential concern area was 15.9 with SD of 2.16, and the post-intervention mean score was 12.2 with SD of 1.96. The pre-intervention depression mean score was 14.6 with SD of 2.81 and post-intervention mean score was 13 with SD of 1.97. The pre-intervention guilt mean score was 12.1 with SD of 3.01 and post-intervention mean score was 11.2 with SD of 1.44. The pre-intervention physical distress mean score was 11.8 with SD of 2.22 and post-intervention mean score was 10.1 with SD of 1.98.

The findings suggest that there was major change in the area of existential concern, depression and physical distress.

‘Z’ test is used for comparison of pretest and posttest perception of grief scores of mothers. The average perception of grief score in pretest was 52.3 which was reduced to 27.6 in posttest. The average perception score reduced remarkably after planned intervention in experimental group mothers. The ‘Z’ value was 24.3 at 59 degrees of freedom. The corresponding p-value was small (of order of 0.000 which is less than 0.05). Therefore, the null hypothesis was rejected. This indicates that the reduction in the perception of grief score is statistically significant. Planned intervention was proved to be significantly effective in reducing the perception of grief score.

The two sample ‘Z’ test was used for comparing the change in perception of grief of mothers in experimental and control groups. Average change in perception of grief
score for experimental group was 24.7 which was 7.9 in control group. ‘Z’ value was 13.5 at 118 degrees of freedom. Corresponding p-value was small (of the order of 0.000 which was less than 0.05). Null hypothesis is rejected. Experimental group had the significantly higher change in perception of grief of mothers as compared to that for control group mothers. Planned intervention is proved significantly effective in reducing the perception of grief.

**Coping strategies of mothers of children with selected chronic diseases:**

The coping strategies and the effect of planned interventions of experimental group were computed by using frequency, percentage, mean, standard deviation, ‘Z’ test and two sample ‘Z’ test. In the pre intervention period, 71.7% of the samples never used any of the coping strategies but after post intervention the score which changed into 68.3% of them have often used coping strategy. This finding clearly indicates that intervention resulted in significant improvement in the coping strategies of mothers of children with selected chronic diseases.

In this research, the mothers used problem solving and emotional coping strategy equally. After the intervention a slight increase in the problem solving area of coping strategy occurred in the experimental group.

‘Z’ test was used for comparison of pretest and posttest coping strategies scores of mothers. The average coping score in pretest was 13.8 which was increased to 34 in posttest. The average coping score increased remarkably after planned intervention in experimental group mothers. The ‘Z’ value was 20.1 at 59 degrees of freedom The
corresponding p-value was small (of order of 0.000 which is less than 0.05). Therefore, the null hypothesis was rejected. This indicates that the increase in the coping score is statistically significant. Planned intervention is proved to be significantly effective in improving the coping strategies.

The two sample ‘Z’ test was used for comparing the change in coping strategies of mothers in experimental and control groups. Average change in coping score for experimental group was 20.2 which was 3.7 in control group. ‘Z’ value was 15.6 at 118 degrees of freedom. Corresponding p-value was small (of the order of 0.000 which was less than 0.05). Null hypothesis is rejected. Experimental group had the significantly higher change in coping scores of mothers as compared to that for control group mothers. Planned intervention is proved significantly effective in improving the coping strategies of the mothers of children having selected chronic diseases.

**Correlation between dependant and demographic variables:**

Demographic variables like number of children, diagnosis, duration of illness, age of the child, gender of the child, and occupation of mothers were co-related with dependant variables such as perception of grief and coping strategies reported and observed at 0.05 level. The co-relations were computed using Fisher’s exact test.

It was found that diagnosis, duration of illness and gender were corelated with perception of grief. Diagnosis duration of illness and gender are the demographic variables which were found to have significant association with perception of grief as p-
values corresponding to demographic variables of diagnosis (0.000) duration of illness (0.013) and gender (0.014) were small.

Mothers of the children who are being diagnosed for leukemia were found to have higher perception of grief scores as compared to those who are diagnosed for Thallassemia. Duration of illness are also found to have significant association with perception of grief. It has been found that perception of grief is more with in one year after diagnosis. It has been found that gender is also associated with perception of grief. Mothers of the male child were found to have severe perception of grief as compared to those those with female child.

Duration of illness are the demographic variables which were found to have significant association with coping strategies as p-values corresponding to demographic variable duration of illness (0.041) were small. Coping strategies were poor in the one year after diagnosis.

**Opinion of mothers regarding planned intervention:**

Opinion of mothers regarding planned intervention was obtained at the end of intervention by opinionnaire. Regarding information booklet 70 % of the mothers strongly agreed that it was useful 65% strongly agreed that the content was adequate and appropriate, regarding the language 63% strongly agreed that it is clear 58 % strongly agreed that accurate and easy to understand. Regarding the presentation of information booklet 55% strongly agreed that it is simple and 47% strongly agreed that it is informative 68% strongly reported that it is attractive and interesting.
Regarding the relaxation therapy 85% of the mothers strongly felt that Relaxation therapy should be given to all the mothers whose children suffering from leukemia or thallasemia. 75% of the mothers strongly agreed that Relaxation therapy will help to reduce the grief and able to cope up with the situation. 62% of the mothers reported that it will help to enhance the positive thinking. 83% strongly agrees that everyone should learn the relaxation therapy. 55 % strongly agrees that it will help to increases the self satisfaction. 57% disagree in the statement of extra time required to do the relaxation therapy. Overall 53% of the mothers reported that relaxation therapy is a best method to decrease the grief and increase the coping strategies. The mothers also reported that they experienced a sense of relaxation, enjoyed good sleep and experienced reduced grief because of the intervention.

Discussion:

The result of this study confirmed the presence of grief in mothers of children with leukemia or thallasemia. These findings are in agreement with prior studies such as that by Quttener et al (1998) who identified the presence of grief in parents of children with leukemia. Also by J E M Betman (2006) who found the presence of grief in mothers of children with cystic fibrosis.6,93

These findings have important implications for parents, researchers and health care professionals. Validating the presence of grief in mothers and acknowledging that grief is a natural response to such a diagnosis would appear to be important, in that it would put mothers and fathers in a better position to understand and address their
feelings. It may also assist in enhancing the predictability of one’s’ behavior which would in turn help in reducing any fears that one will lose control. Similarly, ensuring that medical practitioners are aware of this loss and its impact would also appear important, in that not only would give them a greater understanding of what mothers experience, it would encourage greater empathy. This in turn would put them in a better position to provide the support and help needed.

Such thinking is supported in the literature with Worthington (2001) suggesting that caring may be closest the medical team can come to curing in regards to many of the difficulties associated with chronic-illness. That is when a condition cannot be cured, one’s ability to help parents through the difficult times is the type of healing that may be most helpful, with there being a great deal that can be done to improve the psychological and social consequences of a condition that will, in turn, assist parents as they continue to live and work though the more difficult stages of reoccurring grief.94

The result of the study shows that interventions can reduce the grief and coping strategies. Kennedy (2004) studied the effect of relaxation exercise including meditative breathing on anxiety levels of mothers whose children with cerebral palsy. A convenience sample of 39 subjects was studied. Anxiety levels were measured prior to and post interventions with the State Trait anxiety inventory. Progressive muscle relaxation, Jackobson relaxation technique, guided imagery and soft music was employed to promote relaxation for one month. A significant reduction in anxiety level was obtained on the post test.99
The above findings support the findings of the present study, which indicates that perception of grief and coping strategies can be reduced over a period of one month.

Implications also arise in the area of simply acknowledging this loss, with Kennedy (1970, cited in Fortier & Wanlass 1984) noting that although an individual may be aware of their grief, they may hide their feelings due to the lack of understanding they feel from the environment. Studies such as this one, which highlights the presence of grief, would therefore seem important in helping to increase understanding in society which could in turn make it easier for individuals to feel their pain rather than feeling that they have to hide it.  

The role of parenting a child with chronic illness has been examined in many studies using both quantitative and qualitative methods. Based on these findings, the clinical nurse can be proactive to provide support systems for families, respect their full range of emotions, and prepare to work with them as team members in the management of their child’s care. Special emphasis must be placed on the mother because she is identified as the one who “carries the burden of care for the child with chronic illness.”

Mothers of children with leukemia and thalassemia use both problem solving and emotional coping strategies. The result revealed that giving information and relaxation technique will help to improve the coping strategies. Stroebe & Schut (1996) found that bio-behavioral interventions like guided imagery, progressive muscle relaxation, and breathing exercise will help to improve the coping strategies of
caretakers of mentally retarded child. Information seeking also seems an important coping strategy for parents. Levers and Drotar (2000) noting that studies have identified mothers desire more information about thalassemia. Interestingly these information parents were after here was not just that concerning various aspects of the disease, such as progression, diet, physical care, and physical development but also information about how to raise Thalassemia children in general, the emotional and social development of these children, what to do when they become ill. With this Levers and Drotar also noted that in receiving information mothers wanted a positive hopeful emphasis from their health care provider.

In all findings cited above and the present study suggest that mothers of children with leukemia and Thalassemia make use of wide range of coping strategies. Planned intervention is effective to improve the coping strategies.

The diagnosis, duration of illness and gender are correlated with the perception of grief. The result revealed that the mothers of children with leukemia are having more grief than the mothers of children with Thalassemia. This may be because of the fear of word cancer or perceiving the concept that cancer is not curable. Oathman (2009) found in his study that parents are having more severe grief and coping problem with in one year after diagnosis. Later on they will try to adjust with the situation. Nusrat ara (2012) stated in her article that preference for a male child is a known fact in India. The family need son to carry on their name. Rakhi adhiti Ghosh (2012) found that mothers too turn away from girl child. The report shows that 22.4% of women look forward to have sons’ rather than daughters as against 20% of men in India wanting a male child.
With the above reference and the findings of the present study shows that mothers are having severe grief with one year after diagnosis and grief because of loss of male child will be more rather than a female child.

Duration of illness is also correlated with coping strategies. Perception of grief is more within one year after diagnosis and coping strategies are poor within one year after diagnosis. Exposure to a stressor over a period of time will reduce its impact on the subject.

When the mother’s opinion about planned intervention (relaxation therapy & information booklet) was asked, none of the mothers denied the positive effect of relaxation therapy and information booklet. They all accepted that every mother should learn relaxation therapy. It was observed by the investigator that all mothers took active part in doing relaxation therapy and shown interest to read the information booklet.

Findings of the study indicate that planned intervention helps to decrease the grief and improve the coping strategies of mothers of children with selected chronic diseases.

Conclusion:

The conclusion drawn from the findings of the study are as follows:

Mothers of children with leukemia and thalassemia experience severe grief. Higher levels of grief are observed in all four areas of grief. The ‘t’ test and ‘Z’ test is
used to find out the effect of planned intervention on perception of grief and coping strategies at 0.000 level of significance. The result revealed that there is a significant reduction in the grief in the experimental group at 0.000 level. Hence the null hypothesis is rejected and alternate hypothesis is accepted.

Mothers of children with leukemia and thalassemia have never used coping strategies. Mothers have used both problem solving and emotional coping strategy equally before intervention. After the intervention slight increase in the problem-solving coping strategy is noted. The ‘t’ test, and ‘Z’ test is used to find out the effect of planned intervention on coping strategies at 0.000 level of significance. The result revealed that there is a significant reduction in the grief in the experimental group at 0.000 level. Hence the null hypothesis is rejected and alternate hypothesis is accepted.

The correlation findings was done using Fisher’s exact test to find out the association between demographic variables and perception of grief and coping strategies at 0.5 level of significance. The result revealed that significant correlation with diagnosis, duration of illness and gender with perception of grief. The average perception score of leukemia is more than the thalasseemia. Duration of illness are also found to have significant association with perception of grief and coping strategies. It has been found that perception of grief is more with in one year after diagnosis and coping stareties are poor with in one year after diagnosis. The study also revealed that gender is also associated with perception of grief. Mothers of the male child were found to have severe perception of grief as compared to those those with female child.
From this research, it is very clear that planned interventions (Relaxation therapy and information booklet) reduce the grief and improve the coping strategies of mothers of children with leukemia and thalassemia.

**Implications:**

The findings of the study have implications for nursing practice, nursing education, nursing administration and nursing research.

**Nursing practice:**

The results of the study are highly significant to nursing practice because it provides a detailed description of the grief and the subscales of grief of mothers of children with leukemia or thalassemia. The information will help the nurses and nurse administrators to understand this grief and take measures to prevent those can be prevented.

The coping strategies vary from person to person. This highlights the fact that each person needs individual attention. Nurses can help the patient and care takers to improve their coping strategies by discussing the strength and weakness of the adopted strategies.

Validating the presence of grief in mothers and acknowledging that grief is a natural response to such a diagnosis would appear to be important, in that it would put mothers and fathers in a better position to understand and address their feelings. It may
also assist in enhancing the predictability of one’s’ behavior which would in turn help in reducing any fears that one will loss control. Similarly, ensuring that medical practitioners are aware of this loss and its impact would also appear important, in that not only would give them a greater understanding of what mothers experience, it would encourage greater empathy. This in turn would put them in a better position to provide the support and help needed.

These findings will be very useful to nursing practice because nurses can give information regarding the disease condition and more over how to take care of the child at home. She can encourage the mothers to ask doubts and clarify those doubts. She can teach the relaxation therapy to the care takers of chronically ill children to reduce the grief and stress related to their child’s disease condition and hospitalization. Nurses are with the patient at all the time. So the children and the caretakers feel comfortable enough with nurses to express enquire about and clarify doubts regarding their experiences. The intervention like relaxation therapy may provide a sense of inner control that will help the children and care takers to cope with grief they experience because of the disease condition.

Another striking finding which has implication for health care and nursing is opinion of mothers regarding planned intervention. Most of them expressed a strong agreement regarding planned intervention. So it is nurse’s responsibility to assess the grief and coping strategies and provide effective intervention.

**Nursing Education:**
The nursing curriculum should include the learning experiences for the students to assess, plan, implement and evaluate nursing intervention based on the felt needs of the mothers of children with chronic diseases. Also should include learning experience in developing and testing self-learning materials, teaching modules, and programmed instructions for teaching mothers regarding care of the chronically ill child at home.

Nursing education across the world is progressing very rapidly. A significant amount of nursing and other research have been conducted on the effect of various alternative therapies on different conditions. While all these are specialty areas, a student nurse learns her clinical skills in a general set up. Hence these research findings will be very useful to nursing education- not only by adding to the theoretical base, but also to help teach nursing students simple complimentary interventions.

**Nursing administration:**

Nursing administration is the vital force in hospital administration. The findings of the research will help nurse administrators to conduct ongoing or in-service education on simple interventions to minimize the grief in self, subordinates and to the patient and care takers.

Research findings like these are of immense help to nursing administrations who can use them to prove to policy makers the role of nurses in reducing grief and coping strategies. The nurse administrator may conduct periodical in-service education on use of alternative therapies and information booklet to reduce the grief and coping strategies of mothers of children with chronic diseases.

**Nursing research:**
Health care environment today is dynamic and more demanding, there is a need to promote research based practice and the use of evaluated methods to measure and document the quality and cost effective care. Results of the present study can encourage the nursing personnel to utilize the intervention in providing care to children with selected chronic diseases. More nursing research should be conducted on the effect of alternative therapies in various hospital settings and in various diseases condition.

**Limitations:**

1. The study was confined to purposive sample of mothers were able to communicate in Marathi or English which limits the generalization.
2. The study findings are limited to the selected hospitals and the study data were limited to the verbal responses of mothers. No observations were made.
3. The researcher did not have any control over the hospital treatments.

**Recommendations:**

On the basis of the findings of the study it is recommended that:

1. Similar studies can be conducted to assess the perception of grief of mothers and fathers separately.
2. Similar studies can be conducted to using other types of bio behavioural interventions such as progressive muscle relaxation, guided imagery, music therapy etc.

3. An explorative and detailed descriptive study may be undertaken to assess the coping strategies of care takers of chronically ill children.

4. A qualitative study can be conducted to assess the perception of grief of mothers of children with selected chronic diseases.

5. The present study can be done with mothers of children with other chronic disease also.

6. A study can be conducted on effectiveness of planned interventions on different stages of grief of mothers of children with chronic illness.

7. A study can be conducted on effect of child’s improvement on mothers health.

**Summary:**

The chapter contained a summary of the findings, discussion, conclusions, implications, limitation and recommendations for future research.
REFERENCES:


6. JASCAP, Child hood acute lymhocytic leukemia, Leukemia and lymphoma research, beating blood cancers, Booklet by Jeet Association for support to cancer patients, Mumbai, India.


17. Sucursala. Dr. Felix, Str. Dr. Romanian Thalassemia Association Contact Information. Romanian Institute Of Hematology And Blood Transfusion; Extension 2006

18. Williams P D Williams, A R Graph et al. (2002) Interrelationship among variables affecting well siblings and mothers in families of children with chronic illness Journal of behavioral medicine 25(5) 414-417


23. Booklet published by National center for complementary and alternative Medicine (NCCAM)


29. Marilyn E Parker, Nursing theories and Nursing practice, second edition, Jaypee publication 268-280

30. Afaf Ibrahim Meleis, Theoretical Nursing, Development and progress, Third edition, Lippincott publication 291-301


40. Coping with Normative Transitions (pp. 218-228). New York: Brunner/ Mazel
   measurement of grief: Age and sex variation. British Journal of Medical
   Psychology, 59, 305-310

   Corporation.

   of research on parental reactions to having a child with a disability. Journal of

43. Wes Lyn’s, E., (2002). A shortened measure of an instrument measuring

   fibrosis. Developmental and Behavioral Pediatrics, 17(1), 48-55.

   Practitioner’s Guide to Empirically Based Measures of Depression. New York,

   to extreme stress: The roles of resource loss and resource availability. In M.
   Ziedner,& N.S. Endler (Eds.), Handbook of Coping. Theory, Research, Applications
   (pp. 322-349). New York, Chichester, Brisbane, Toronto, Singapore: John Wiley
   and Sons Inc


59. Brown Ronald T. PhD, Ivers-Landis, Carolyn. PhD, Drotar, Dennis PhD, Bunke, Vicki PhD, Lambert, Richard G. PhD, Walker, A. Adrienne M.A. Factors Associated with The Attitudes and Expectations of the Patient’s Suffering from Thalassemia; Scandinavian Journal Of Caring Sciences. May 2004; Volume 18; (2) 177-187

60. Hardy et al. (2004), assessing coping strategies, a theory based approach. Journal of personality and social psychology, 22(3), 45-50


65. Annika Lindahl Norberg (2005) Parent coping when the child is diagnosed as Leukemia, Journal of Pediatric Oncology Nursing, 16(1). 3-12


72. Eleanor Donegan, mechanisms by which AR and CBT worked and also to determine if one was more effective than the other at maintaining long-term symptom reduction British Journal of Medical Psychology, 67, 37-52.

73. Michelle Y. Kibby, Effectiveness of psychological intervention for parents of children with chronic medical illness.


81. Afran Shargli, Mogan Karbakhsh, Bhrooz abaei, Alipas. Depression In Mothers Of Children with Thalassemia Blood Malignancies: A Study From Iran, Clin Pract Epidemol Mental Health.October 2006; Volume 2,

82. D’Souza , A development of a booklet for parents of neonates admitted to neonatal intensive care unit, based on the information needs, Journal Of Pediatrics Nursing, 2004; Volume 21; (2) 142-152.


89. Kothari, C.R (2004); Research methodology methods and techniques (2nd edition), New Delhi, New age international limit edition publishers.


93. Anto Augustine (2010), A retreat before doom, relaxation therapy, Chaitanya Mental Health Care Center, Pune. 79-82
94. V care foundation, Coping with chemotherapy, support and hope for those touched by leukemia.


102. Nusrat aura, Preference for a male child is a known fact in India, Women’s news network, Jan 18, 2012.

103. Rashi Aditi Ghosh, Mothers too turn away from girl child, DNA, Nov 24 2012.