HIV/AIDS is one of the greatest biomedical challenges in the present century. It is not merely a health problem but a security crisis. It has developed into a disaster with a social impact more devastating than any other disease. HIV positive mothers face devastating physical manifestations, unique psychological and social problems. It is a stigmatising disease. The affected persons have feelings of guilt, loss, loneliness, hopelessness, fear, rejection and prejudice, with impact on parenting. Their children are isolated, abandoned and exhibit physical and mental retardation. They experience anxiety and depression which affects their quality of life (QOL). Chronic depressive symptoms are associated with increased mortality in HIV positive mothers. Stress and depression can result in slight decline of CD4 cells and compromise the body’s immune function. Depression results in self neglect, forgetfulness and poor adherence to ARV drugs. Nursing being a holistic science, it is imperative for nurses to understand the psychosocial aspects of HIV+ mothers. Such knowledge will help in planning and implementing comprehensive nursing care.

Objectives
The present study sought to identify the psychosocial problems of HIV positive and HIV negative mothers, and compare the psychosocial problems of HIV positive mothers with that of HIV negative mothers.

Research Hypothesis: The mean psycho-social problems score of HIV positive mothers will be significantly higher than the mean psycho-social problem score of HIV negative mothers.

Operational Definition: Psycho-social problems are the ways in which emotional and social dimensions of the HIV positive and negative mothers operate such as emotional dimension: anxiety, depression and hopelessness. Social dimensions are problems encountered in the relationship with the spouse, parents, in-laws, friends, neighbours, problems related to parenting and sexuality which are common to both HIV negative and positive mothers. Social problems specific to HIV positive mothers are custody, disclosure, stigma and financial problems.

The term HIV Positive Mothers refers to women who are positive for HIV antibodies in Elisa test, confirmed by a consultant physician and having a living child or children from birth to 18 years. HIV Negative Mothers refers to mothers who are negative for HIV antibodies in Elisa test, confirmed by a consultant physician and having a living child or children from birth to 18 years.

Conceptual Frame Work: This study is based upon sister Callista Roy’s adaptation model

Methodology
The study, adopting a comparative, descriptive and correlation design was conducted in STD Department, ART centre, Maternity Department and OPD of Govt. Rajaji Hospital, HIV OPD of Meenakshi Mission Hospital and Research Centre, Madurai.

The target population consisted of HIV positive and negative women attending these centres and having a child or children from birth to 18 years. The
sample size was 320 HIV positive and 320 HIV negative mothers. Purposive sampling method was followed.

The following instruments were used:

Part I: Demographic profile of the HIV positive and negative mothers (Table 1).

Part II: (A) Hospital Anxiety and Depression scale by AS Zigmond and RP Snaith. (B) Becks Hopelessness scale designed by Aaron T Beck.

Part III: Structured Interview Schedule on family and social life of HIV positive and negative mothers to assess and compare their social problems (used only for HIV positive mothers).

Part IV: Structured Interview Schedule - family and social life specific to HIV positive mothers to assess the social problems of HIV positive mothers.

Validity of the instruments was established. Split half and Cronbach alpha methods were used to establish reliability.

**Data collection procedure:** Formal permission to conduct the study was obtained from the head of the selected institution. All the HIV mothers were aware of their HIV status. Before starting the interview, the oral consent of the client was obtained and confidentiality was assured. Willing clients were interviewed. The subjects were selected by purposive sampling technique. By using the above mentioned tools HIV positive mothers were interviewed and rapport was established before administering the tools. HIV negative mothers were interviewed to make assessment and comparison between HIV positive and negative mothers.

**Results**

**Psychological Problems of HIV Positive and Negative Mothers**

Majority of HIV positive mothers exhibited higher level of anxiety, depression and hopelessness (mean score 65.3, 63.3 and 67) than the HIV negative mothers (mean score 19, 16.5 and 17.2) (Fig.1).

One way Anova results on psychological problems for HIV positive mothers based on marital status, type of family and income.

- HIV positive mothers who are widowed / separated had higher level of Anxiety, Depression and Hopelessness than the women living with spouse.
- HIV positive mothers living with parents or living alone had more Anxiety, Depression and Hopelessness levels when compared to those living in nuclear or joint family.

**Social problems of HIV positive and negative mothers**

- Majority of the HIV positive mothers had experienced more social problems than the HIV negative mothers.
- Majority of HIV positive mothers experienced more social problem with regard to relationship with the spouse (mean score 35.6) than the HIV negative mothers (mean score 20.1).
- HIV positive mothers experienced more prob-

**Table 1: Distribution of Samples according to the Demographic Variables**

<table>
<thead>
<tr>
<th>No.</th>
<th>Demographic Variable</th>
<th>HIV+ mothers (n=320)</th>
<th>HIV- mothers (n=320)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age (in years)</td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td></td>
<td>Below 20</td>
<td>3</td>
<td>0.9</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>21-25</td>
<td>47</td>
<td>14.7</td>
<td>153</td>
</tr>
<tr>
<td></td>
<td>26-30</td>
<td>139</td>
<td>43.5</td>
<td>107</td>
</tr>
<tr>
<td></td>
<td>31-35</td>
<td>90</td>
<td>28.1</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>&gt; 36</td>
<td>41</td>
<td>12.8</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Education</td>
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</tr>
<tr>
<td></td>
<td>Uneducated</td>
<td>110</td>
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<td>117</td>
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<td></td>
<td>Primary Education</td>
<td>136</td>
<td>42.5</td>
<td>124</td>
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<tr>
<td></td>
<td>Secondary</td>
<td>50</td>
<td>15.7</td>
<td>35</td>
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<tr>
<td></td>
<td>Graduate</td>
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<td>6.6</td>
<td>37</td>
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<tr>
<td></td>
<td>Post Graduate</td>
<td>3</td>
<td>0.9</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Income (in Rs.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt; 1000</td>
<td>133</td>
<td>41.6</td>
<td>123</td>
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<tr>
<td></td>
<td>1001-2000</td>
<td>138</td>
<td>43.1</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>2001-3000</td>
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<td>36</td>
</tr>
<tr>
<td></td>
<td>&gt; 3000</td>
<td>18</td>
<td>5.7</td>
<td>21</td>
</tr>
</tbody>
</table>

**Fig. 1: One way Anova results on social problems for HIV positive mothers based on income**
lems in sexual relationship with the spouse (mean score 65.9) than the HIV negative mothers (mean score 19.4).

- HIV positive mothers experienced more problems in parenting (mean score 67.8) than the HIV negative mothers (mean score 52.2).

- A large number of HIV positive mothers experienced more problems in their relationship with significant others (mean score 39.6) than the HIV negative mothers (mean score 23.5).

- The mean score of Social Problems (total) was significantly higher among the HIV positive mothers (mean score 49.7) than the HIV negative mothers (mean score 28.8).

**Fig. 2: Comparison of Psychosocial Problems of HIV Positive and HIV Negative Mothers**

The HIV positive mothers in income groups of < Rs. 1000 and between Rs. 1001 – 2000 had more Social Problems than the higher income group with regard to Parenting, Stigma and Relationship with significant others.

### Comparison of mean score of psychosocial problems of HIV positive and negative mothers

The psychosocial problems were significantly higher among the HIV positive mothers (mean score 52.1) than the HIV negative mothers (mean score 33.8). \( t = 32.93, p < 0.05 \), as shown in Fig. 2.

### Social problems specific to HIV +ve mothers

HIV positive mothers experienced social problems which are specific to their illness. In case of eventuality in future, mostly their parents (56.9%) would be the custodian for the children and for 36.9 percent none would be the custodians (Fig. 3).

With regard to disclosure of HIV status, most HIV positive mothers disclosed to their parents (83.4%) than to other members in the family.

Majority of them had expressed their emotion regarding HIV status to their parents than to others.

Majority of the HIV positive mothers experienced avoidance, isolation, inability to go to public places and fear that their children would be looked down (Table 2).

Mostly expense was met by parents (32.5%) or their spouse (32.5%), but most of the HIV positive mothers felt that they were burden on their supporters.

### Discussion

The study revealed that HIV positive mothers had experienced more psychological distress than the HIV negative mothers. This finding has been sup-
ported by other studies.

Scarvalone et al (1996) assessed psychological distress among 50 HIV positive adults at Cornell University Medical Centre in New York. The authors concluded that comorbid psychiatric illnesses, including depression were common in HIV-infected patients. Catalan (1999) Cierla & Roberts (2001) and Lesserman (2002), Prathap Tharyan, Suja Kurian, Santhose Clement (2003) stated that the range of mental health problems that accompanied HIV infection included severe depression, suicidal inclination and attempts, mania psycho-delirium and dementia.

Amodei et al (1997) conducted a study on the extent of stress and differences in sources of stress experienced by HIV+ and HIV- caregivers of HIV positive children living in south Texas. HIV positive caregivers reported that compared to the HIV negative group they perceived themselves to be in poorer physical or emotional health, to receive less social support from others.

HIV positive mothers experienced more social problems within the family, stigma and parenting than the mothers in the normal population. In line with this finding, Sailer et al (1993) showed massive problems within HIV positive women and their children such as considerable partner problems and social isolation. There was a lack of child care to relieve the mothers.

Nursing Implications

Nurses can intervene to reduce the physical discomfort and psychosocial problems that will improve the total coping ability and quality of life in providing emotional support and reassurance to the HIV positive mothers and their entire family. This study will help the nursing personnel to be aware of the psychological and social problems of the HIV positive mothers and help them to plan and implement the care.

Conclusion

Among the HIV positive mothers 43.5 percent were in the age group of 26 to 30 years. Among the HIV negative mothers 47.8 percent were in the age group of 21 to 25. A Large number of HIV positive and negative mothers were either illiterate or had primary education. HIV infection is more common among people with low socio economic status. A Large number of HIV Positive mothers i.e. 40.6 percent were widows and 10 percent were separated from the spouse. Among the positive mothers 29.4 percent were living with parents and 21.3 percent were living alone. Majority of HIV positive mothers had experienced more psychological problems, anxiety, depression and hopelessness than the HIV negative mothers.

Majority of the HIV positive mothers had experienced more social problems than the HIV negative mothers. Many HIV positive mothers experienced more social problem with regard to relationship with the spouses, sexuality and parenting than the HIV negative mothers. HIV positive mothers experienced social problems which were specific to their illness with regard to custody to their children, disclosure, stigma and financial problems.

Recommendations

♦ Nurses need to help the HIV patients to set goals for their future by reframing their planning processes so as to bring healthy changes in one’s lifestyle, becoming socially active and seeking information.

♦ Nurses need to counsel HIV positive clients in order to reduce their stress. All nurses should undergo special training on counselling HIV positive clients and need to be involved in individualised and need-based counselling.

♦ Nurses must encourage and facilitate interactions among people with HIV or AIDS by providing education, social support and role models for coping with the illness and that will help decrease isolation and stigma; they should explain the need for antenatal checkup and ARV treatment and assist in preventing mother to child transmission; help parents with custody planning; preventing opportunistic infection.

♦ Increasing competency of Nurses as educator advocates and caretakers and develop Innov-
tive technique to educate others.

References

5. Antony Jennit, Anandhi S, Mary E, Thilagavathy CV, Samuel NM. Anxiety and Stress of HIV positive patients on Antiretroviral therapy in South India. 4th International Conference on AIDS India, 2005, pp 33