Improvement of marital intimacy scale and study of this instrument on measuring the result of psychotherapy

Makmuri Muchlas
Department of Psychiatry Faculty of Medicine
Gadjah Mada University, Yogyakarta

ABSTRAK
Makmuri Muchlas - Perbaikan skala keintiman perkawinan dan studi skala ini untuk mengukur hasil psikoterapi.

Muchlas 1 telah mengadopsi Skala Keintiman Perkawinan (16 butir pernyataan) dari the 36-items of PARI (Person-centered Assessment of Intimacy in Relationships) untuk diuji di Indonesia dengan kualitas Jawa. Dalam disertasi ini, skala ini digunakan untuk bisa meneliti, bahwa menganalisis status keintiman Jawa para pasir yang mengalami berbagai kurus kesehatan Jawa, salah satunya maupun peningkatan keintiman perkawinan mereka. Tujuannya

1. Menganalisis skala ini dengan baik dan menganalisis, kebenaran skala ini telah diuji dan dapat diuji, dalam studinya turner alat skala ini menunjukkan bahwa, kebenaran maupun validitas yang termasuk skala ini pada sebuah butir pernyataan memiliki konsistensi internal yang tinggi, ada butir pernyataan yang lebih baik dalam bentuk metafora, menunjukkan masyarakat dirumah keintiman, ada batera ungkapan yang kurang tepat dan mungkin 10 butir pernyataan itu biasa disebut dimensi-alat keintiman perkawinan.

Studi ini memanfaatkan metode kualitatif kuantitatif. 10 orang yang diselidiki secara random, menjelaskan skala Keintiman Perkawinan, 16 butir pernyataan. Pernyataan instrumen ini memiliki validitas dan konsistensi internal yang baik baik. Pada studi ini Revital Skala Keintiman Perkawinan dikuangkan untuk meneliti keintiman perkawinan mereka yang menerima kecemasan dan sedang berkonsultasi ke PSK untuk mengukur peranannya. Dalam studi eksperimental dengan psikoterapi, 100 orang diselidiki secara random, menjelaskan 50 orang dalam kelompok experimental yang diberi psikoterapi dan 50 orang dalam kelompok kontrol yang tidak diberi psikoterapi. Kemudian keintiman perkawinan mereka dalam dua kelompok tersebut diukur dengan instrumen baru ini adalah dan wajar bagi psikoterapi. Hasilnya menunjukkan perbedaan yang bermakna di antara kedua kelompok tersebut, dan kecerdasan cakap dalam kriteria pemilihan warna dan cakap dalam kriteria pemilihan warna yang digunakan dalam study ini, skala ini menunjukkan cukup baik.

ABSTRACT
Makmuri Muchlas - Improvement of marital intimacy scale and a study of this instrument on measuring the result of psychotherapy

Muchlas 1 has adapted marital intimacy scale (10 questions) from 36-items of PARI (Person-centered Assessment of Intimacy in Relationships) to suit with Javanese culture. In his dissertation, the scale was used to describe that one of the ways to increase the condition of mental health of mothers attending a course on mental health is by improving their marital intimacy. The result is not like what was expected although the scale had been approved in the reliability and validity test. In his study on this scale, Sudijanto2 said that although it had significant validity, the n=10 still had low internal consistency; there were normative questions, asking about marital intimacy instead of intimacy; several statements were inappropriate and the ten questions might not represent marital intimacy dimensions. The demand to revise this scale became urgent, as the scale is the only one planned for Indonesia and its practicality is required to evaluate the results of consultations on marital problems as well as mental health conducted by existing institutions, especially the Advisory Board of Mental and Separation Problems (PMPS). Later Muchlas and Sudijanto3 revised this scale of marital intimacy, and it became the first scale of marital intimacy (15 questions). This new scale had better validation and internal consistency. In this study the revision of the scale of marital intimacy was used to measure the marital intimacy of Indonesian patients who visited PSK for consultation concerning their separation. Through an experimental study using psychotherapy, 100 random samples were divided into two groups; 50 samples belonged to a group provided with psychotherapy and 50 other samples belonged to a control group without psychotherapy. Their marital intimacy was measured using the new instrument before and after they were
INTRODUCTION

In his dissertation on An Evaluation of Community-Based Mental Health Course in Indonesia, Muchlas suggested that the positive result of the course on the participants mental health could be influenced by their increased marital intimacy. Some authors also reported that marital conflict impairs marital intimacy, or marital relationships, and that this, in turn, may contribute to mental illness. It is possible then, that coping skills can reduce psychiatric symptoms indirectly, through reduced marital conflict and increased marital intimacy.

Because the meaning of marital intimacy varies from culture to culture, no completely suitable instrument could be found in the literature. This lack of suitability applies, for example, to an instrument developed at the University of Western Ontario, the Waring Intimacy Questionnaire, and to the Personal Assessment of Intimacy in Relationships (PAIR). For this reason, as an attempt was made to adapt the PAIR to Javanese culture. The PAIR itself is considered to be reasonably good instrument in terms of its reliability and validity. Reliability coefficient associated with its dimensions have been reported to range from 0.70 to 0.77. Its predictive validity has been assessed by comparing it with the WIQ. The resulting correlation coefficient was 0.771.

As with the PAIR, the items used in the Muchlas study covered five dimensions of intimacy, i.e. emotional, social, sexual, intellectual and recreational. The scale consisted of five pairs of statements formulated by the writer (the full text and scoring of this instrument is found in Appendix 2). The results indicated that increased mental health status among neurotic course participants were not accompanied by the increased marital intimacy. No conclusion was reached concerning the extent to which reduced conflict contributed to, or resulted from, the reduction of psychiatric symptoms. There was, moreover, no evidence that reductions in conflict were the result of improved coping skills, or that these reductions led to increased intimacy. These negative results might reflect a flaw in the underlying conceptual framework. In addition, however, the adequacy of the measures that were employed could be questioned.

For this reason, further studies on the marital intimacy scale were considered very important, due to the fact that in Indonesia, many marital problems or mental health problems related to marital conflicts cannot be measured objectively. Likewise, the development of couples marital intimacy being treated in the family therapy or psychotherapy, cannot be followed up objectively without the use of valid and reliable marital intimacy scale.

Development of Marital Intimacy Scale

As mentioned before, the items on marital intimacy in Muchlas study were adapted from a published instrument, the PAIR. Again, however, it is possible that an inadequate number of items was included, even though in pilot study, the resulting scores produced a test-retest reliability coefficient of 0.87. In the main study, however, the initial scores were already high, averaging approximately 30 on a scale of 40. It is possible therefore that the measure was insensitive to subsequent increases in intimacy.

Due to the fact that this kind of instrument is important for measuring the result of family therapy, so it is quite needed to be used in Indonesia, Sudiyanto has studied this instrument independently by testing it among housewife participants in mental health course in Surakarta. Assuming that participants had different levels of their marital intimacy, they were questioned for their levels of intimacy by using this Marital Intimacy Scale (MIS) and the PAIR. The results indicated that this instrument showed a good
concurrent validity with the PAIR ($r=0.71$; $p<0.01$) and a good result of test-retest reliability ($r=0.80$; $p<0.01$). Nevertheless, the result of internal validity test through item analysis was not good enough. Some items had low coefficient correlations with the total score, had asked mortality rather than intimacy and had too strictly and straightway questions.

Looking at the above flaws and relative small number of items (10 items compared with 36 items of the PAIR) that could not cover dimensions of ‘intimacy, Muchlas & Sudijono’ then, revised this instrument by adding one item to each dimension of intimacy and modified some items suitable for couples. This 15 items of Revised Marital Intimacy Scale (REMS) was revalidated further among 78 married woman participants in mental health course. Again, assuming that participants had different levels of their marital intimacy, they were questioned for their levels of intimacy by using both, the MIS and the REMS. Besides they were questioned for their mental health status by using the SCL-90 (96-items of Symptoms Check-List). In the analysis of internal consistency, compared with the MIS, the REMS showed a better coefficient correlation between each item and the total score. All positive coefficient correlations were ranging from 0.34 to 0.69 ($p<0.01$). While coefficient correlations of MIS items were ranging from 0.12 to 0.66 ($p>0.05$; $p<0.01$) (see Appendix 1). Through these respondents, the sensitivity and specificity of the REMS were also examined which showed the cut-off score of 37. Furthermore, the REMS was significantly related to Depression, Anxiety, Interpersonal Sensitivity and Hostility. This means that the better marital intimacy was related to the lower risk of depression, anxiety, interpersonal sensitivity and hostility.

It was proven then that the validity of revised instrument was improved as compared with the old MIS. It has not been proven, though, that this REMS is a quite good instrument to measure the result of family therapy or psychotherapy (psychiatric intervention). For this reason, further study was conducted among married respondents with anxiety who visited the Advisory Board of Marital and Separation Problems (BP4) for divorce consultation.

**Aim of Study, Usefulness and Originality**

The aim of this study is to test further the validity of REMS for measuring the result of psychotherapy (psychiatric intervention) among married respondents with anxiety who are at process of marital divorce.

This study is very useful, due to the fact that many unhealthy marital problems consulted to the BP4 need to be measured their marital intimacy for estimating levels of problem and again, after some intervention by the BP4 consultants, they are remeasured to see the improvement of their marital intimacy.

This study is considered original due to the fact that the REMS adapted from the PAIR was designed for Japanese culture and as far as the writers knowledge this kind of instrument, being useful for marital counseling, is the only one set up in Indonesia.

**Research Question**

As mentioned above, the REMS has never been used for measuring the result of family therapy or psychotherapy, whether there was an increased intimacy in their marriage after such a treatment. This study was conducted joining the study of risk factors and psychiatric intervention as an effort to prevent marital divorce among Moslems with anxiety in the Special Territory of Yogyakarta. It was reported by the Department of Religion that the 1987 divorce rate in Indonesia was 12.96%, while in the Special Territory of Yogyakarta the 1987 divorce rate was 9.74%.

This rate is considered high, and needs more attention from the government and non-government agencies. It was mentioned as well that marital disorders such as psychoses, depression, anxiety and other neurotic conditions have some degree of relationships with the marital divorce. Psychiatric intervention or other family therapy were conducted, even though it was difficult to measure levels of marital problems and furthermore, to estimate the result of such intervention.

For this reason, the use of REMS in this study was expected to answer the problems. Research question could be raised as follows:

Is the use of REMS valid for measuring the result of psychotherapy (psychiatric intervention) among married respondents with anxiety?
who were in process of marital divorce or is it true that the increased of marital intimacy measured by the RFMIS was followed by the decreased of divorces among married respondents with anxiety, after receiving some psychiatric intervention? This question need to be studied further.

SUBJECTS AND METHODS

This study was carried out to join together in the stage III of Soewadi study done in 1988 (July 1 - December 31, 1988)\(^\text{12}\). There were 1065 cases visited the BF4 for divorce consultation in Special Territory of Yogyakarta. One hundred out of them were diagnosed as suffering from anxiety reaction and were allocated at random to be included in the randomized control trial, using the before-after control group design. Using the table of random number, 100 cases were divided into two groups, 50 for experimental group and another 50 for control group. The experimental group received a psychiatric intervention (psychotherapy and if necessary with anxiolytics) while the control group did not receive such a treatment.

Psychotherapy given here was a brief psychotherapy, consisted of 10 sessions of 30 minutes individual session, twice a week. The REMIS (Appendix 2) was applied to both group, before and after treatment, questioning their marital intimacy, i.e. starting on July 1988 for the first interview (T1) and starting on December 31, 1988 for the second interview (T2). Data on marital intimacy were analyzed separately from Soewadi study because of different aim and direction. Predictive validity was expected through the higher score of increased marital intimacy among respondents in the experimental group compared with that in the control group. Statistical analysis was done using t-test, due to the fact that the variability of continuum data in this study will be more accurately analyzed by this kind of test.

RESULTS AND DISCUSSION

Result from the use of REMIS to measure levels of marital intimacy among married respondents with anxiety who visited the BF4 for divorce-consultation, can be depicted here as seen in TABLE 1 and FIGURE 1.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Time 1 (X ± SD)</th>
<th>Time 2 (X ± SD)</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>34.74±6.98</td>
<td>43.24±4.08</td>
<td>t = 11.36; df = 49; p = 0.001</td>
</tr>
<tr>
<td>who received psychiatric intervention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>35.80±3.80</td>
<td>37.47±2.44</td>
<td>t = 4.18; df = 49; p = 0.001</td>
</tr>
<tr>
<td>who didn’t receive psychiatric intervention</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Time 1 = First interview (T1)
Time 2 = Second interview (T2)

As seen in the TABLE 1, the basic line data (T1) have shown the almost similar level of marital intimacy scores among both groups, while data at T2 (after psychiatric treatment for the experimental group) have shown significantly higher level of marital intimacy score for the experimental group compared with that for the control group. This kind of result can be more clearly seen in the FIGURE 1 where the line of experimental group has shown the higher inclination compared with the almost horizontal line of the control group.

**FIGURE 1.** Mean Scores of Marital Intimacy by Group and Time of Interview

---

176
Score differences of Marital Intimacy in the Experimental and Control Groups between Time 1 and Time 2 can be seen below:

- Experimental Group (n = 50):
  Mean of differences (de) = 8.50
  SD = 4.31
- Control Group (n = 50):
  Mean of differences (de) = 3.66
  SD = 2.82

For differentiating de and dc:
- t-value = 6.13
- df = 49
- p = 0.001

Looking at the above result, marital intimacy of both groups were improved after psychotherapy, but the increased intimacy in the experimental group was significantly higher compared with that in the control group.

**Discussion**

This study is very important, as part of the continuing series of studies related to the Marital Intimacy Scale. The first use of this instrument was to measure the marital intimacy of married women participants in the mental health course whether any development of intimacy, especially among neurotic participants, by attending the course. Unfortunately, the increased mental health status among neurotic course participants were not accompanied by the increased marital intimacy.

That is why, Sudiyanto tried to study further this instrument descriptively, as housewife participants in mental health course in Surakarta compared with the PAIR. The results indicated that while this instrument showed a good concurrent validity with the PAIR, it had a low internal validity; some items had a low coefficient correlations with the total score, had asked mentally rather than intimacy and had too strictly and strained questions. Muchas & Sudiyanto tried to improve the MIS to become the REMIS and studied further REMIS descriptively the among 78 married women participants in the mental health course. The results indicated that the REMIS was more valid and reliable compared with the MIS, besides it had a good correlation with depression, anxiety, interpersonal sensitivity and hostility. The REMIS, however, has not been applied for the experimental study measuring the result of psychotherapy among psychiatric cases. That is why this study is quite strategic to evaluate objectively the result of such psychotherapy by using the REMIS.

Result from the use of REMIS in this study indicated that before a psychiatric intervention (a brief psychotherapy and if necessary with anxiety) the mean scores of both groups in the marital intimacy were almost similar, under the cut off score at 37. This means that respondents with anxiety were less intimate in their marriages. After a psychiatric intervention, though, mean scores of both groups were remarkably different. In the experimental group, mean score at Time 2 was strikingly higher than mean score at Time 1. In the control group, mean score at Time 2 was less higher than mean score at Time 1. The differences of mean score in both groups at different time of interviews were statistically significant (see TABLE 1). This means that even in the control group there was an improvement of marital intimacy, even though they did not receive a psychotherapy. It is possible that such a Hawthorne effect (showing an effort to have an almost similar result with the experimental group due to the existence of jealousy being selected in the control group) could be responsible for this phenomena.

To make sure that the increased scores in the experimental group were strikingly higher than that in the control group, t-test of score-differences between two groups was also conducted and the result was statistically very significant.

So the validity of REMIS has been proven good enough to measure levels of marital intimacy. Lower scores of marital intimacy for a worse mental health status (anxiety reaction in this study) or before a psychotherapy and higher scores of marital intimacy for a better mental health status or after a psychotherapy.

Furthermore, the validity of REMIS would become stronger and could answer more the research questions compared with the short term and longer term result of psychotherapy by Loewald in terms of their marriage settlement. It has been shown that those in the experimental group, who had the higher mean score of intimacy, after treatment for their anxiety were more settled in their marriages compared with those in the control group, who had the lower mean score of intimacy.
Finally the use of REMIS for following up the result of family therapy or psychotherapy is becoming very important due to the same statements that in western countries, mental illness was related to marital conflict and in Yogyakarta, anxiety was also related to marital divorce as found in the Soejadi study.  

CONCLUSION  
A study on the improvement of the 10-items of Marital Intimacy Scale (MIS) to become the 15-items of Revised Marital Intimacy Scale (RE- 
MIS) has been conducted. The validity and internal consistency of the REMIS was proven better compared with that of the MIS when being used in the Muchlas & Sudiyantos study and in this study.  

Hopefully that this instrument of marital intimacy which is originally adapted from the PAIR in order to be suitable for the Javanese culture, can be used independently for different settings of similar studies or can be applied for practical uses in the marital or mental health problems and degree of improvements.

ACKNOWLEDGMENT  
I would like to thank Soejadi S.D., M.P.H., Ph.D., Psychiatrist for permitting me to join together in his main study for collecting data on marital intimacy reassayed by the RE- 
MIS, which are invaluable for this study. This study could not have been carried out without his permission.

REFERENCES  
APPENDIX 1

Comparison of the internal consistency of 26 MIS and the REMIS.

<table>
<thead>
<tr>
<th>No. of Item</th>
<th>Old MIS (REMISS)</th>
<th>Contents</th>
<th>Old</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>- My husband is patient, loving and understanding</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>- I try to make my husband feel good</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>- My husband and I are on good terms</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>- My husband and I have important social activities</td>
<td>0.43</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>- I am friendly with my husband’s friends</td>
<td>0.48</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>- I know all my husband’s in-laws’ close friends</td>
<td>0.42</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>- My husband and I are in conformity on our sexual needs</td>
<td>0.51</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>- My husband and I do not violate religious restrictions in our sexual life</td>
<td>0.48</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>- I have the same attitude towards sexual norms</td>
<td>0.36</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>- I know my husband’s in-laws’ hobbies</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>- My husband is not important to me</td>
<td>0.45</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>- I know my husband’s hobbies and interests</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>- My husband and I have never talked about the future</td>
<td>0.40</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>- In leisure time, I do things to please my husband’s in-laws</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>- My husband and I have a sufficient time to be together</td>
<td>0.65</td>
<td></td>
</tr>
</tbody>
</table>

Note: *significant (p<0.05).


APPENDIX 2

Below are some statements about marital relationship. Read each one carefully and select one of the numbered descriptions that best describes the way in which that statement applies to you. Place that number in the open block in the statement. Do not skip any item, and print your number clearly. If you change your mind, make your final number completely. If you have any question, please ask the interviewer.

Descriptions

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>never, or very rarely</td>
</tr>
<tr>
<td>1</td>
<td>rarely</td>
</tr>
<tr>
<td>2</td>
<td>sometimes</td>
</tr>
<tr>
<td>3</td>
<td>almost always</td>
</tr>
<tr>
<td>4</td>
<td>always</td>
</tr>
</tbody>
</table>

1. My husband/wife is patient, loving and understanding
2. I try to make my husband/wife feel good
3. My husband/wife supports my important social activities
4. I am friendly with my husband’s in-laws’ friends regardless of their religion
5. My husband/wife and I are in conformity on our sexual needs
6. My husband/wife and I do not violate religious restrictions in our sexual life
7. My husband/wife shares with me his/her personal problems
8. I obey my husband/wife in matters that are not important to me
9. In his/her leisure time, I do things to please my husband/wife
10. I cook my husband’s in-laws’ special food

Responses are scored from 0 (never or very rarely) to 4 (always). The responses are then added up to form a total score.

APPENDIX 3

The Indonesian version of the Revised Marital Intimacy Scale (Yosua Sjau’i, Kristinna Perkawinan).