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PSYCHIATRIC SEQUELAE OF AMOK

ABSTRACT. The authors present evidence of an indigenous diagnostic system by which Malay culture defines Amok, and of the disparate relations between individual conceptualization, behavior, and tradition which contributes to the labeling process.

Amok is viewed as a cultural prescription for violent behavior in response to a given set of conditions. It is not a disease but rather a behavioral sequence, perceived as illness, that may be precipitated by various etiological factors.

Finally, evidence is presented to support the hypothesis that traditional forms of Amok are being replaced by new variants in which psychopathology is increasingly evident.

1. INTRODUCTION

Amok has been defined by Yap (1951) as an acute outburst of unrestrained violence associated with homicidal attacks, preceded by a period of brooding and ending with exhaustion and amnesia. The fury of the patient may be quite undirected and he may strike down animals and humans indiscriminately in his path. Medically, it has been ascribed to epilepsy, liver disorders, infection, confusion from malaria or cerebral lesions, hashish poisoning, sunstroke, schizophrenia, organic brain syndrome, and mania. Socioculturally, it is a phenomenon of the Malay Archipelago, a standardized form of intense emotional release, accepted by the community and expected of any male individual who is placed for some reason or other in an intolerably embarrassing or shameful situation. The indiscriminate killings are considered a continuation of revengeful feelings but within the context of saving face in the closely-knit kampong community. The Amok must reestablish himself in the eyes of his fellow man and proceeds to do so by a "violent assertion of his power" – the only court of appeal known to his fathers for countless generations (Van Loon 1927; Galloway 1923; Fitzgerald 1923; Van Wulffen-Palthe 1933).

Yap (1969) has argued that Amok is one of the 'culture bound reactive syndromes', forms of psychopathology produced by certain systems of implicit values, social structure, and obviously shared beliefs indigenous to certain areas. Although social and cultural factors may produce special forms of mental illness, Yap viewed these as only atypical variants of generally distributed psychogenic disorders.

The few clinical studies of Amok reported in the literature suggest support for this view. Zaguierre (1957) examined 25 military cases of Amok in the Philippines and diagnosed 17 in terms of common psychiatric disorders. Tan (1965) studied five cases of Amok in West Malaysia and found all five consistent
with Bleuler's definition of schizophrenia. Schmidt et al. (1977) described an intensive study of 24 cases in East Malaysia and concluded that all 24 cases met the criteria for traditional diagnostic categories.

A major shortcoming of such studies is that ex post facto diagnoses on the basis of second hand report are of questionable validity. An alternative approach to the problem would be to examine the outcome of treatment as a means of cross-validating the diagnosis. If Amok is but an atypical variant of common psychiatric disorders, then once the particular disorder is diagnosed, the treatment course for any patient should be consistent with the predicted course for that disorder. Any variation from the expected sequelae for a specific disorder would argue against support of Yap's hypothesis and suggest, instead, that Amok has not only unique clinical features, but having differentiable sequelae, is indeed a unique clinical entity as well.

2. MATERIAL FOR STUDY

In Hospital Bahagia, Ulu Kinta, West Malaysia, there were 134 patients in the male security ward at the time of this study. Of these, 21 were labeled 'Amok' when first brought in for admission. These cases were on indefinite detention in the Security Ward of the hospital 'under the Ruler's pleasure' after being pronounced guilty but insane in Court (Criminal Procedure Code 1971). They had been in the ward for varying periods of time ranging from 1 to 29 years and had received varying forms of treatment. Case files were thoroughly reviewed. The identifying data, sociocultural background, the nature of the amok attack, the post-amok state, and the mental status on admission were recorded. All patients were then interviewed in their native tongues and questioned regarding their view of amok. Ten patients were familiar with the concept of Amok (sophisticated), six had never heard of Amok (naive), and five were still psychotic and non-communicative.

The ten cases who were familiar with the concept were all male Malays, from rural areas, illiterate, and padi-planters, rubber-tappers, labourers, or unemployed. They consistently defined Amok as an illness characterized by sudden acute violence against any living thing using 'anything handy' as a weapon. It is caused by spirits, magic, threat, fever, or God and is precipitated by anger, anxiety, or disturbed thoughts. The patient is always unconscious and, therefore, not responsible. Multiple victims are usually the case, but death of the victim need not occur. Following Amok, the patient claims amnesia for the entire event and is exhausted for a prolonged period. The family response was generally one of sympathy, mixed with fear, shame, and sadness. The community response tended to be one of fearful respect or notoriety mixed with some anger.

In important respects the defining characteristics provided by our subjects
were more general than the classic definitions reported in the literature. First, our subjects insisted the 'illness' was no respector of race, sex, or age. The traditional view is that the Amok is a middle-aged male Malay. Second, our subjects defined weapons as 'anything handy'. The traditional view is that the *kris* (jagged dagger), *parang* (machete), or spear are the traditional weapons of choice. Third, our informants were agreed the illness was recurrent, yet none of the patients had had a recurrent attack, nor did they know of any case in which this had occurred. This relates to a fourth difference, namely, that while our Amoks reported cessation occurs through force, spontaneous recovery, or appeal to reason, classic reports uniformly emphasized force (usually resulting in death) as the only successful means of termination.

Interestingly, the actual acts of violence committed by these ten patients were more consistent with the traditional view of Amok than with their own definition of the phenomenon (a point to which we shall return in our discussion). Hence, we have called these ten patients the 'true' Amok in that their behavior, cultural background, and demographic descriptors were consistent with the classical definition of Amok (Shaw 1972).

The six patients who were naive regarding Amok were Chinese or Indian males, from urban centers, and were employed in mercantile occupations, e.g., shop clerks or hawkers. They committed murder (by their own description) in a fit of rage, had fewer victims (2.2 versus 4.3 by the true Amok), and used a variety of weapons, none of which are associated with traditional Amok (e.g., guns, scissors, meat cleavers, hoes, etc.) They had no consistent cultural explanation for their crimes (only personal explanations), and were totally unfamiliar with the one that had somehow been apparently imposed upon them by the civil system.

The remaining five cases were severely psychotic at the time of the study, were incoherent, and totally incommunicative. Since they could not be interviewed, their familiarity with the concept of Amok, and their own account of their behavior could not be determined. Their records revealed, however, that all had histories of marginal psychological and economic adjustment prior to hospitalization and had been psychotic throughout their hospital course.

3. THE INDIGENOUS DIAGNOSTIC SYSTEM

Confronted with the problem of explaining (a) why some 'Amoks' did not know they were Amoks while others did, and (b) why the Amok came to be located in the mental hospital, we intensively reviewed civil records of the original assault and subsequent events. The labeling appeared to be a function of the cultural background of the arresting officer — all were Malays! This explained why some
of the patients (Chinese and Indian), unfamiliar with the concept, were so labeled.

The routing to the mental hospital, while complex, followed from this initial labeling. In Malay culture Amok is seen as 'mental illness' and it is apparent from the review of official records that this basic assumption influenced all subsequent judicial and medical decisions regarding the Amok — i.e., they were pronounced 'guilty by reason of insanity' and removed to the mental hospital. There they came under observation by trained psychiatrists for the first time. (Carr and Tan 1976).

4. METHODOLOGY

This paper is concerned with the course of events that followed after the amok patient had been admitted.

The progress of the amok cases can be studied in detail since they have all been inpatients in the security ward. Throughout their stay they have been exposed to the same ward environment. Hence, differences in their psychiatric sequelae should reflect the intrinsic or endogenous qualities of their 'illness' rather than differential psychosocial factors found in the outside community.

For purposes of analysis the age of onset of the amok incident, the duration of the initial 'psychotic' or abnormal behavior in the ward, the total duration of hospitalization, the type of treatment, and the outcome of treatment were examined as a function of (A) relapse, and (B) sophistication with respect to Amok.

5. FINDINGS

Of the ten 'sophisticated' Amoks, eight were diagnosed as schizophrenic. One was a case of manic-depressive psychosis with a history of previous admission for a manic episode. Prior to his second admission he committed murder, but he has stayed in the hospital for five years and has had no relapses of abnormal behavior. The tenth case was diagnosed as general paresis after laboratory confirmatory evidence. It was presumed he committed murder during a psychotic episode due to his organic brain disease, but the patient had been symptom free during his hospitalization for the past 24 years. All of the six 'naive' Amoks were diagnosed as schizophrenic.

6. 'SOPHISTICATED' AMOKS

The average age at the time of admission of the relapse group was 29.3 years versus 32.3 years for the 'non-relapsers'. Among the relapsers, the duration of
their first episode of abnormal behavior was about 2.2 months. For the non-relapsers, the duration of their first and only episode of abnormal behavior was 4.9 months. Three out of four relapse patients were treated with oral phenothiazine whereas only one non-relapse patient had phenothiazine. However, the prescribing of phenothiazine did not alter the progress of the patients in the terms of relapses. Of four patients admitted in the pre-phenothiazine era, three remained symptom-free after their initial psychosis for 23, 24, and 29 years, whereas the fourth experienced about seven relapses over a period of 18 years' hospitalization.

Amongst the relapers, the average number of relapses per patient was four. In terms of their progress in the ward, one patient was socializing well while the other three cases, although not overtly psychotic, were considered as abnormal in behavior much of the time they were on the ward. Two were physically aggressive, attempting to assault staff members or fellow patients during relapses, and one patient became episodically withdrawn. In contrast, all the non-relapers socialized well and took an active part in the rehabilitative programs within the ward.

The total length of stay in the ward averaged 8.7 years for the relapers and 15.6 years for the non-relapers. Obviously, increased frequency of relapse is not the result of time spent within the security ward.

7. 'NAIVE' AMOKS

As can be seen in Table I, there is little difference in hospital course between sophisticated versus naive amoks with the exception of type of treatment offered. While the majority of patients in the other groups tended to receive essentially a phenothiazine-oriented program, the non-relapsing 'sophisticated' amok group was unique in that only one-sixth received phenothiazine treatment.

8. DISCUSSION

While there is overlap in the groups, there are distinctive characteristics worthy of note. The relapers tended to be younger at the time of Amok, were from a more recent cohort, had more recent admissions, and were clearly of the phenothiazine era, which may account in part for their more rapid recovery from the initial episode.

The non-relapers were of an older age and cohort. Although fewer received phenothiazine treatment, they did not relapse following the initial episode which, in fact, was longer than in the relapsing patients. Despite the fact that almost all of the patients had the same diagnosis, there were clearly two differentiable groups based on sequelae. It seems likely that the relapsing patients are, indeed, cases of severe chronic psychopathology, who during their
TABLE I
Hospital course of 16 Amok patients

<table>
<thead>
<tr>
<th>Race*</th>
<th>Age at Amok</th>
<th>Year</th>
<th>Duration 1st &quot;psychotic&quot; episode</th>
<th>Treatment**</th>
<th># Relapses</th>
<th>Duration hospital stay</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RELAPSING PATIENTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'Sophisticated' Amoks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>35</td>
<td>1951</td>
<td>3 mo.</td>
<td>obs.</td>
<td>7+</td>
<td>18 yr.</td>
</tr>
<tr>
<td>M</td>
<td>26</td>
<td>1966</td>
<td>5 mo.</td>
<td>P</td>
<td>4</td>
<td>9 yr.</td>
</tr>
<tr>
<td>M</td>
<td>35</td>
<td>1972</td>
<td>0 mo.</td>
<td>P</td>
<td>3</td>
<td>2 yr.</td>
</tr>
<tr>
<td>M</td>
<td>21</td>
<td>1974</td>
<td>0.8 mo.</td>
<td>P</td>
<td>2</td>
<td>1 yr.</td>
</tr>
<tr>
<td>MEAN</td>
<td>29.3</td>
<td>51–74</td>
<td>2.2</td>
<td>3P/1 obs.</td>
<td>4</td>
<td>7.5</td>
</tr>
<tr>
<td>'Naive' Amoks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>38</td>
<td>1963</td>
<td>2 mo.</td>
<td>P</td>
<td>20+</td>
<td>12 yr.</td>
</tr>
<tr>
<td>C</td>
<td>30</td>
<td>1965</td>
<td>12 mo.</td>
<td>P</td>
<td>1</td>
<td>10 yr.</td>
</tr>
<tr>
<td>MEAN</td>
<td>34</td>
<td>7</td>
<td>2P</td>
<td>10.5</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Total Mean Score</td>
<td>30.8</td>
<td>3.8 mo.</td>
<td>5P/1 obs.</td>
<td>6.2</td>
<td>8.7</td>
<td></td>
</tr>
<tr>
<td><strong>NON-RELAPSING PATIENTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'Sophisticated' Amoks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>42</td>
<td>1946</td>
<td>8 mo.</td>
<td>obs.</td>
<td>0</td>
<td>28 yr.</td>
</tr>
<tr>
<td>M</td>
<td>40</td>
<td>1949</td>
<td>1 mo.</td>
<td>obs.</td>
<td>0</td>
<td>24 yr.</td>
</tr>
<tr>
<td>M</td>
<td>33</td>
<td>1952</td>
<td>9 mo.</td>
<td>obs.</td>
<td>0</td>
<td>23 yr.</td>
</tr>
<tr>
<td>M</td>
<td>31</td>
<td>1955</td>
<td>8 mo.</td>
<td>obs/P–'59</td>
<td>0</td>
<td>19.3 yr.</td>
</tr>
<tr>
<td>M</td>
<td>35</td>
<td>1968</td>
<td>3 mo.</td>
<td>obs.</td>
<td>0</td>
<td>4.5 yr.</td>
</tr>
<tr>
<td>M</td>
<td>23</td>
<td>1973</td>
<td>0.5 mo.</td>
<td>obs.</td>
<td>0</td>
<td>1.5 yr.</td>
</tr>
<tr>
<td>MEAN</td>
<td>32.3</td>
<td>46–73</td>
<td>4.9</td>
<td>5 obs/1P</td>
<td>0</td>
<td>16.7</td>
</tr>
<tr>
<td>'Naive' Amoks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>34</td>
<td>1951</td>
<td>13 mo.</td>
<td>P?</td>
<td>0</td>
<td>23 yr.</td>
</tr>
<tr>
<td>C</td>
<td>42</td>
<td>1956</td>
<td>2 mo.</td>
<td>obs.</td>
<td>0</td>
<td>19 yr.</td>
</tr>
<tr>
<td>C</td>
<td>40</td>
<td>1962</td>
<td>3 mo.</td>
<td>P</td>
<td>0</td>
<td>12 yr.</td>
</tr>
<tr>
<td>C</td>
<td>43</td>
<td>1973</td>
<td>3 mo.</td>
<td>P</td>
<td>0</td>
<td>2 yr.</td>
</tr>
<tr>
<td>MEAN</td>
<td>39.8</td>
<td>5.3</td>
<td>3P/1 obs.</td>
<td>0</td>
<td>14.0</td>
<td></td>
</tr>
<tr>
<td>Total Mean Score</td>
<td>35.3</td>
<td>5.1</td>
<td>6 obs/4P</td>
<td>0</td>
<td>15.6</td>
<td></td>
</tr>
</tbody>
</table>

* M = Malay; C = Chinese.
** obs. = observation; P = phenothiazine.

acute psychotic episode committed murder or injured others in a manner consistent with the Amok tradition, and, therefore, were 'diagnosed' 'Amok' by the Malay police who apprehended them. Their progress in the hospital suggests that subsequent relapses (assaultive behavior) were repetitions of earlier psychotic episodes. In contrast, there is ample reason to question whether the non-relapsing, sophisticated group of Amok is (or ever was) psychotic. These patients more closely approximate the classical Amok since they spontaneously recovered from the immediate post-amok state and adjusted well to the life of
the security ward, showing none of the abnormal behavior or sequelae that would be consistent with untreated severe chronic psychopathology, for up to 28 years.

While these 21 patients came from diverse races and backgrounds, had differing etiologies and treatments, and varied outcomes, they were all labeled ‘Amok’. Apparently, this common ‘diagnosis’ derived from sharing in common the following:

1. they engaged in violently assaultive behavior;
2. they were apprehended by a Malay policeman who was
3. utilizing defining criteria sufficiently general to allow incorporation of the diverse behavioral and background dimensions.

We noted earlier a peculiar disparity between how the patient defined the concept (more general) versus how the patient behaved (more specific), which, in turn, was more consistent with the traditional view of Amok reported throughout the literature by non-Malay observers (more specific). We have noted in other contexts the propensity of the Malay for precise and highly predictable behavior, while tolerating a remarkable degree of ambiguity and indefiniteness in their conceptualization and language (Che'Asmah 1968; Endicott 1970). We would conclude that it is this process which accounts for the ‘indigenous diagnostic system’ whereby naive as well as sophisticated amoks are defined.

The results further suggest that while the majority of cases labeled ‘Amok’ are indeed variants of more familiar psychiatric disorders, there is a small cohort of older patients who evidence post-morbid sequelae consistent with ‘classical Amok’. Thus, our findings appear to support Murphy’s (1973) thesis that, when viewed as an epidemiological phenomenon, Amok has undergone a number of changes, both in incidence as well as nature over the past several centuries. Specifically, the traditional form of the behavior (seen in older cohorts) is being replaced by a new variant in which a variety of psychopathological processes are increasingly evident. Put another way, Amok is a culturally (Malay) prescribed form of violent behavior, sanctioned by tradition as an appropriate response to a given set of conditions. It is not, per se, a disease, but a behavioral sequence that may be precipitated by any number of etiological factors, among them physical, psychological, and socio-cultural determinants.

9. SUMMARY

Sixteen cases of Amok were intensively studied and interviewed in the Security Ward of Hospital Bahagia, Ulu Kinta, Malaysia. Their psychiatric sequelae were studied in terms of duration of hospitalization, relapse rate, progress on the ward, and sophistication regarding the concept of Amok. There was little difference in the hospital course of sophisticated (knowledgeable about Amok)
versus naive patients. It was found that some patients followed the course of a chronic relapsing schizophrenic illness despite phenothiazine medication, whereas a group remained symptom-free over an average of sixteen years' hospitalization, and in the case of sophisticated patients, without medication. It is postulated that the latter group represents a decreasing cohort of classical cases of Amok, a culture-bound syndrome of some degree of specificity in its etiology, nature of attack, and sequelae, which is being replaced by variant forms in which psychopathology has increasingly intruded.

ACKNOWLEDGMENTS

We wish to thank Dr. Edward Tan, Director of Hospital Bahagia, Ulu Kinta, Perak and Professor Eng Seong Tan, former Head of the Department of Psychological Medicine, University of Malaya for their encouragement and kind assistance in the preparation of this paper. Thanks are also due to Mr. Kwek (Hospital Assistant of the Security Ward of Hospital Bahagia) and his staff members who helped during the interviews and data collection.

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REFERENCES

Carr, J. E., and E. K. Tan

Che' Asmah, O.

Criminal Procedure Code.
1971 Chapter 6, Reprint No. 1. Federated Malay States.

Endicott, K. M.

Fitzgerald, R. D.

Galloway, D. J.

Murphy, H. B. M.

Schmidt, K., L. Hill, and G. Guthrie.
Shaw, W.

Tan, Eng Seong

Van Loon, F. H. G.

Van Wulfften-Palthe, P. M.

Yap, P. M.


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(Received 1 July, 1976)