VI LSD No. 95 (§102a) M 377 psychotic effect
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Variations in ego feeling induced by d-lysergic acid diethylamide (LSD-25).


PROBLEM: see Title.

MATERIAL: 300 observations on 32 hospitalized patients (6 acute schizophrenics, 8 chronic schizophrenics, 15 schizoid personalities with depression and 3 involitional depressives) and 6 normal controls. Most observations were made on the normal subjects and the acute schizophrenics.

DOSE - METHOD: 10-100 μg orally or by injection just before or after breakfast. In normal subjects effects could be induced by doses as low as 10 μg but acute schizophrenics were relatively less reactive and required 100 μg to produce a much slighter effect.

RESULTS: In normal subjects disturbances comparable to those produced by LSD could not be demonstrated in the past experience of these patients. In acute schizophrenia the symptoms caused by LSD appeared to be an exaggeration of already existing symptoms but not invariably as some of these reported visual hallucinations which they had not previously observed. Where clinical evidence of depersonalization was already present, such symptoms were intensified by LSD. Generally, the chronic schizophrenics did not show the phenomena listed below; however, they did show behavior similar to that observed during the more acute phases of their illness. The schizoids and involitional depressives complained chiefly of an intensification of anxiety, depression and somatic symptoms. The effects of LSD usually began within 1/2-1 hour of administration, regardless of the route employed. Most individuals developed tolerance to LSD after repeated doses.

1. Hallucinations: In 5 controls and 4 schizophrenics. Hallucinations of sound, taste, smell, touch and body sense; the most vivid were visual. The hallucinations could sometimes be related to various stimuli from the external environment, e.g. radio or internal environment, e.g. sensation of thirst. Subjective feelings were projected. At times the hallucinations could be conjured up by will, induced by direct suggestion or by a voluntary effort to see a particular hallucination. At other times, they refused to appear or appeared in some variant. Thoughts could be shown to be directly translated into symbols seen as visual hallucinations.

2. Elation, depression and anxiety: Euphoria was not the most common response, it occurred in only 3 controls, 2 schizophrenics, 3 schizoids and 1 involitional depressive. The first manifestations were subjective (sense of well-being). This was followed by a withdrawal from the outer world. The depression is often an intensification of previous depression often accompanied by feelings of helplessness and a wish to die. Weeping was frequent (in 2 cases it was related to the feeling of helplessness). Anxiety was present whenever any response to LSD was noted, and was manifested by "nervousness", somatic complaints, fear, restlessness and requests for LSD to be terminated. Less overt anxiety was demonstrated by the controls who were somewhat conversant with medical research and by the schizophrenics. Naive control subjects and schizoid patients showed intense anxiety.

3. Autistic states: Verbal communications were generally entirely rational. However, at deep levels of intoxication autistic production were noted. One example is given.

4. Ego disturbances, depersonalization and delusion formation: All the normal controls and 4 schizophrenics showed profound ego disturbances after LSD. Two controls and 4 schizophrenics showed delusion formation. The first effects of LSD were simple feelings of changes in the self and the external world.

5. Changes in body ego feeling: Increase in extent and intensity of body ego feeling about 30 min. after LSD. The body became the focus of attention. Every sensation became pleasurable. (The euphoria associated with the early phases of LSD intoxication has a large somatic component) The variations in body ego feeling are not pleasurable to anxious subjects, who complain of pain and paraesthesia. Severe dizziness as well as inability to coordinate the senses. Body symmetry became lost. The body became plastic, warped and distorted. The complete loss of body feeling or its regression to the mouth, tongue and lips was not complete when the subject suffered from an already existing pain or hypochondriac tendency.
6. **Changes in boundary of body ego:** Ego feeling is withdrawn from the ego boundaries of the body, and they become weakened, fluid and variable. Initially, the change is in the direction of enlargement of the ego boundary so that anything happening within the room is felt within the body. Perceived actions and hallucinated motions are appersonated. Gradually, the ego boundaries become constricted.

7. **Estrangement of the body:** The gradual withdrawal of ego feeling from the ego boundaries of the subject's own body may not be noticed initially. If the subject’s attention is then drawn to what was formerly invested with ego feeling, this is felt as estranged. Estrangement of any part of the body may be observed. By a tremendous effort of will the individual can dispel estrangement and enforce recognition of the part of the body, but this effort cannot be maintained.

8. **Depersonalization:** In time the body is totally estranged, the subject feeling that his body is not his and that it functions automatically. In one case the depersonalization proceeded to a degree where his body was projected as a machine which made him see pictures (hallucinations) and controlled his thoughts, feelings and actions.

9. **Changes in mental ego feeling:** Initially, mental ego feeling is heightened. Thought processes are noticed more. Ideas seem unusually rich. Thinking becomes pleasurable. Affect is intensified. Perceptions are quickened. Concept of spatial relations is impaired. Concept of distance is lost. Disorientation in space may proceed to a point where the world no longer appears upright and is tilted.

10. **Estrangement of external world:** Gradually, ego feeling is withdrawn from perceptions. Whatever is perceived, appears strange and unfamiliar. Initially, the feeling of estrangement can be dispelled by concentrating on familiar objects. Eventually, it is no longer possible to restore the feeling of familiarity by concentration.

11. **Estrangement of time perception:** Ego feeling is withdrawn from the ego boundary for time. Impaired ability to estimate the passage of time, but also a sense of timelessness. Past, present and future lose all meaning.

12. **Loss of ego feeling for thoughts and feelings:** Eventually, the individual withdraws ego feeling from his thoughts, ideas and feelings. He no longer has any identification with his own feelings. Thoughts take on the character of objective reality and are no longer recognizable as the subject’s own thoughts. As the ego boundaries become constricted, thoughts and affect are projected into the outside world and are felt as impinging from without rather than as arising from the ego itself. Conflicts are also separated from the individual. The subject may even refer to himself in the third person. Yet he is still capable of effective action.

13. **Regression to earlier ego states:** Hallucinated conversations are sometimes recognized as memories of conversations which actually happened. The subject regresses to an earlier ego state. Episodes of depersonalization are sometimes recognized as reenactments of previous experience. Evidence of regression to earlier ego states may be noted in the Rorschach test. The protocol of one patient under LSD differed from a control protocol dated 4 months earlier, but closely resembled another made 10 years previously.

**COMMENT:** SAVAGE (LSD 20) has previously reported on the effects of LSD. The present paper makes no mention of the therapeutic effect of LSD. Tolerance to LSD has been reported by ISBELL et al. (LSD 82).

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