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DRUGS AND HUMAN INTERACTIONS

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Summary. - *Some reflections and hypotheses on drugs and human interactions are presented from a psychiatric-psychotherapeutic point of view. Considering the drug both as an agent and a relational mediator, an attempt is made to systematize the interactive whole of the intraindividual and interindividual effects activated by drugs. The hypothesis is presented that pharmacological effects on mind are prevalently due to an energic action and that this action is status-specific, in other words relative to a mental-relational good order of the individual in that particular moment of his history. Concerning the extrapharmacological effects in therapeutic relations, the values assumed from the drug during the course of the interaction are different and variable, depending in the same individual (patient or therapist) on superimposition of several experiential and semantic orders. Finally some elements of drug relational psychology are introduced.*

KEY WORDS: psychotropic drugs, psychiatry, psychotherapy, doctor-patient relationship, extrapharmacological factors.

Riassunto (Farmaci ed interazioni umane). - *Vengono proposte riflessioni e ipotesi sul rapporto tra "farmaci e interazioni umane", visto principalmente nella prospettiva psichiatrica-psicoterapeutica. Il farmaco viene considerato come agente e mediatore relazionale e si tenta una sistematizzazione del complesso interattivo degli effetti intraindividuali e interindividuali messi in moto dal farmaco. Si propone l'ipotesi che gli effetti farmacologici sulla psiche siano prevalentemente dovuti a una azione energetica e che questa azione sia status-specifica, relativa cioè soprattutto all'assetto mentale-relazionale dell'individuo in quel momento della sua storia. Per quanto riguarda gli effetti extrafarmacologici nelle relazioni terapeutiche, il farmaco assume valori diversi e variabili nel corso delle interazioni, derivanti dalla sovrapposizione nello stesso individuo, vuoi paziente vuoi terapeuta, di più ordini esperienziali e semantici. Il lavoro si conclude con la proposizione di elementi di psicologia relazionale del farmaco.*

PAROLE CHIAVE: psicofarmaci, psichiatria, relazione medico-paziente, fattori extrafarmacologici.

The theme is old and quite extensive and it is possible to face it from many points of view. Furthermore, in regard to this issue, hypothesis are still more conspicuous than certitudes, although the possibility to rise a large number of data from daily observations.

I am referring to psychiatric-psychotherapeutic practice because it is possible to develop the theme proposed under this point of view. Being impossible to work out an exhaustive study of the subject, I will propose some considerations with the purpose to spur discussion.

Sic rerum summa novatur semper,
et inter se mortales mutua vivunt.

These very well know lines taken from Lucrezio's *De rerum natura* seem to be essential, in my opinion, because they introduce the subject and emphasize the basic distinctive features of human interactions: the change, in the sense of "novamento" (something of new is rising), and the reciprocal exchange. The interactive relational perspective is outlined: *inter se mutua vivunt.*

It is possible to consider the remedy as an example even if completely peculiar of a relational change object both depurated and able to produce changes and transformations.

The following words are now obligatory. As we know even in the drug-mediated relationship the hidden intention - of both the one who gives and the one who takes the drug - is to keep the things how they are or, at least, to change the situation only a little.

It is possible to explain this phenomenon if we imagine the interhuman exchanges as situations-conditions in which, at *a deep and primitive level*, antagonist couples of terms like: to take/to take possession, to take/to leave or to touch/to cover (to put hands on), to draw back/to discover, are acting.

The more these primordial levels are active, the more we must expect relational avoidance of anxiety or of fear resulting from the verbal constructions aforesaid and from

the ghosts linked to them. This point of view is questionable. Out of curiosity I remember that the English "to take" derives from latin *tango, tactum*, that means to take possession touching or covering (putting hands on) [1]; so that the meaning of "to take" would be linked with symbology of touching to cover (with hands).

I will present now a scheme about drugs and human interactions in which drug is considered as a relational agent and mediator (Fig. 1).

The drug, psychotropic or not, does not produce only intraindividual effects, depending both on factors and characteristics concerning the pharmacological substance used and not pharmacological factors, but even interindividual effects, depending almost exclusively on factors unrelated to the pharmacological substance used. The intraindividual effect reverberates and acts on the interindividual whole; on the other hand the interindividual effects certainly influence individual trim. Despite the apparent simplicity we have to deal with a very complex system of interactive factors.

Even if it seems to be simple the first problem is still not solved. I am talking about the definition and understanding of peculiar action of the drug on the individual. Both the scientific information carried on by the pharmaceutical industries and psychiatric literature tends to simplify, to reduce or to detail in "rational" therapeutic schemes the psychopharmacotherapeutic issues. *Pecunia urget* probably could be the reason why: less problems, more certitudes, more prescriptions.

It is necessary, I think, to courageously reshuffle the concept of psychopharmacological action specificity, concerning not only the nosological specificity that is always questionable, but also the symptomatic and syndromic one.

For example we call *antidepressants* different chemical substances. The scandal consists in the fact that different chemical and biochemical actions (corresponding to different structural formulas) are surreptitiously described with an univocal psychological and psychiatric (antidepressant) specificity. So is given for granted what is not granted at all, *i.e.* that a chemical substance is able *vi propria* to produce complex mental (and behavioural) effects as the antidepressant or, even worst, the antipsychotic effect.

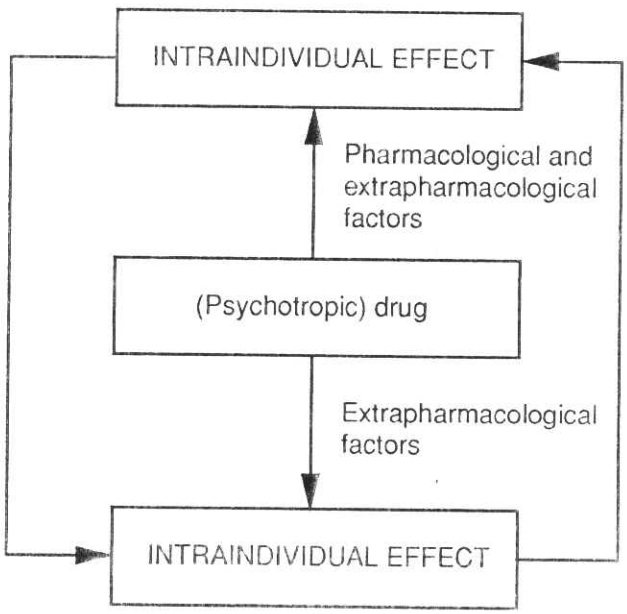

Fig. 1. - Drug as a relational agent and mediator.

At present time we know very much about psychotropic biochemistry of the drugs, but so far the way in which it is possible to influence the world of ideas, emotions, and behaviour is not clear. Animal models' reductionism is even more obvious in this field and seems to be absolutely inadequate when it looks for some form of correspondance with the fireworks of human mind's signification.

As a matter of fact, anyway, we should recognize as valid the hypothesis of the effectiveness of some psycotropic substances, e.g. antidepressants, that certainly doesn't derive only from the suggestion carried by the name "antidepressant".

The way in which biochemical modifications induce modifications in the ideo-affective set cannot be explained simply referring to modifications of certain cerebral structures (like for example lymbic and hypothalamic-diencephalic circuits) physiology or otherwise we could not explain why a similar (antidepressant) effect can be produced by different substances that have different biochemical effects and different targets in cerebral structures.

We cannot, nor should, in my opinion, go back to Delay's old classification in which psychotropic substances were distinguished according to their stimulating, depressant or deviant action on mental *energy* (italic is mine). But this classification is still full of heuristic suggestion.

William Blake wrote: "Energy is the only life and it comes from the body; and reason is the limitant and external circumference of energy". It is useful now to quote the well known passage in Freud's *An outline of psychoanalysis* [2]: "Here we have approached the still shrouded secret of the nature of the psychical. We assume, as other natural sciences have led us to expect, that in mental life some kind of energy is at work; but we have nothing to go upon which will enable us to come nearer to knowledge of it by analogies with other forms of energy. We seem to recognize that nervous or psychical energy occurs in two forms, one freely mobile and another, by comparison, bound; we speak of cathexes and hypercathexes of psychical material, and even venture to suppose that a hypercathexis brings about a kind of synthesis of different processes - a synthesis in the course of which free energy is transformed into bound energy. Further than this we have not advanced". While moving energy is an Id's characteristic, the fixed energy is an Ego's characteristic.

According to the suggestions of Freud's economical metapsychology (too often disdainfully defined hydraulic), drug would act on the energy invested on objects mental representations.

We could hypothesize that the pharmacological effect on mind (*soul* as Freud said) previously depends (more or less) *on an energetic action and that this action is status-specific*, mainly related with the individual's mental-relational asset in that particular moment of his history.

With regard to the first point of the sentence, the modification of significances axis, of representations and of the ideo-affective world would take place through a modification of the energetic distribution, or rather of mind's economy.

In regard to this it could be useful to propose a reconsideration of the repression's model, connecting it, as Rosario Merendino does, to the concept of structural unconscious, *i.e.* to the so called unconscious way of knowing and elaborating the object separated and at the same time at the service of the conscious way of learning and of entering in relation.

"When it works, thought uses up energy: so it has to regulate his own work for having always a quantum of investible energy and for avoiding the exceedement of a certain investment threshold using pleasure or not-unpleasure functions. The result is that it cannot use all the stimuli perceived coming from represented objects and neither immediately have the use and the pleasure of them; so it as to move away its interest, affect and meaning from some representation, to deprive them of the belonging sense and the quality of represented-object relationated and relationable to the self and to give them the characteristic of an indifferent representation-object, in the sense of not desirable and enjoyable" (Merendino, unpublished, 1991).

So the repression would consist both in a kind of relation with the representation and in a way of relating the representation to the self, a way in which, with regard to the representation of its own objects, the suspension of affects, the withdrawal of meaning and the black out of cognitive attention prevail.

Clearly, typically human, is that all the repressed can be reinvested, remeaned, redesired and reenjoyed.

It is possible, I think, to agree with the idea that the psychopharmacological biochemistry, certainly of energetic type and working exclusively on the body's structures, can act on the interface between cerebral *hardware* and mental *software*, so producing qualitative effects. We can suppose that the quality-quantity axis declines itself on a continuum. Actually the psychological concept of continuum finds supporters not only in the psychoanalitic world.

Erickson [3], the psychoanalyst, said, for example, that reverie is a "constant seesaw which goes near and then far from the relative equilibrium state", a seesaw between what we like to do and what we should do.

I will analyze now the second point. The fact that action of the drug can be status-specific could explain the issue of the common clinical evidences of both undesired side effects and of indifference of the pharmacological action. The drug response would depend on the actual bio-psychological asset of the individual's history, more than on the symptomatic-syndromic *targets* so dear to the "pharmacologist".

I would like you to see, with regard to this issue, the classic and old scheme of Wilder [4], representative of the basimethric conceptions in psychiatry: the response depends on the basic-line of the individual asset (Table 1). The model is that of the excited and tensed subject which looks for a cigarette because it calms him, while the exhausted and tired individual smokes it because doing so he stimulates himself. If that happens with simple substances with a relatively simple action, let's imagine what can happen with complex substances as neuroleptic and tricyclics are. From this point of view the stimulant-sedative association is not so irrational; after all we can consider lithium as something like that.

Following the same line we can explain why some "real" depressed (major and endogenous) "gets well" after one or few days of tricyclic antidepressant assumption, perhaps complaining only for undesired side effects.

In this field we can include Kammerer's experiences with Majeptil [5], a powerful neuroleptic that is now not for sale, in acute delusional psychoses: the exit syndromes were classified as "motor" (with an increase of both psychomotor activity and of the pathological conscience contents), hypochondriac and maniac.

The space dedicated to the pharmacological factors is, I think, too wide in relation to this paper's lenght. I have tried to point out the importance of the individual pharmacological aspect or, if you prefer, the simple relationship between drug and somatic subject, with the aim of avoiding confusive and epistemically misleading ambiguities of certain psychoanalytic-relational approaches. In other words the drug and its use cannot have the exclusive value of a generical *soutien* or of a pharmacological *pseudo-holding* neither of a sheer relational (triangular or groupal) mediator that has to be controlled and/or interpreted; I consider incorrect to deny that drug is a real pharmacological agent of transformations.

Table 1. - *Reaction to a standard dose of stimulant or inhibitor*

Initial stimulation	Reaction to the stimulating	Reaction to the inhibitor	Initial inhibition	Reaction to the stimulating	Reaction to the inhibitor
high	feeble, absent or paradoxical	intense	high	intense	feeble, absent or paradoxical
medium	medium	medium	medium	medium	medium
low	intense	feeble, absent or paradoxical	low	feeble	intense

The extrapharmacological factors are referred to a series of facts more or less connected with consciousness, that has something to deal with the drug conceived as a relational *accidens*. Their definitions derives from prescriber's and assumer's life experiences interacting in the relational system, that can schematically be distinguished in a dual ambit (doctor-patient), in a groupal one (doctors-patient, doctor-patients, doctor-patient-family and so on) and in a more extensively social one (doctor-patient-society). Both of these relational system's ambits can be focalized from environmental and cultural conditions which allow some extrapharmacological assumptions to prevail over others.

Extrapharmacological factors, as I summarize in the scheme (Fig. 1), should be important only and primarily because of their production of interindividual effects, that is to say more specifically relational ones.

Racamier and Carretier [6] think that nobody takes drugs only for their biological effect, but because of the qualities he/she ascribes to the therapist prescribing them. In the last two decades many psychoanalysts, according to the relational-systemic therapists' positions, pointed out that the study of relations-representations is much more important than the study of representations kept separate from self and of patient's objects.

In the last years, indeed, psychoanalysts have tried to settle both concepts of transference and countertransference in the comprehensive concept of therapist-patient, analyst-analyzed relation. Besides, Freud himself can be seen as a relation's theorist: he points out, in this thesis, the centrality of oedipal *relation* and particularly of introjective relational intrapsychicity (see the concept of unconscious-internal world and of its relations opposed-interacting with the conscious-external world relations).

The literature on the definition and systematization on the extrapharmacological factors occurring in psychiatric practice is very poor, especially if we think at the plentifulness of "pharmacological" papers. Even the most recent and enlightened psychopharmacotherapy books undervalue these issues. It is important to quote here professor Guyotat's Lyon group historical merits, that is studying the relation between psychotropic drugs and psychotherapies since 1960. I also remember the violent theoretical disputes, occurring mainly in France (see Vinatier *Colloque*), between psychoanalysts as Andrè Green [7] and the *chimiâtres* as Claude Blanc [8] defined himself. These disputes have been solved, perhaps, abandoning rather than maintaining a dialogue.

In the doctor-patient relation and in the psychotherapeutic *settings* drug assumes different meanings *that change while the interaction flows*, complex meanings because often they derive from the union of different experiential or semantic orders in the same person, patient or therapist.

Prescriber and taker have frequently different and not shared non-pharmacological graduations, images and meanings. Frequently both the actors are not conscious of certain pharmacological-relational values and the problem rises only when some abnormal clinical evidences appear in the relation course. All of us can remember some real experiences in this field.

I remember, with regard to psychotropic drugs use in psychotherapeutic specificity, that in the fifties scientific-experimental experiences of introducing not specifically therapeutic drugs in the psychotherapeutic setting have been carried on with the purpose of improving the therapeutic relationship. I am talking about dLSD 25, mescaline, sodic amital and benzedrine use. Savage [9] thought that LSD could have an effective value in facilitating overcoming resistance and the emerging of painful and repressed emotions; Abramson [10] said that LSD intensifies the relation with the doctor and helps an intense countertranference process manifestation; for others this in not true but instead LSD created troubles in the ongoing relationship, tension and powerlessness in therapist's attitude and it is even possible that the gap between therapist and his patient increases. Hoch, Cattel and Pennes [11] conclude that LSD and mescaline can be used, likewise other substances as sodic amital and benzedrine, as psychotherapy's facilitators.

I have talked about these old and now abandoned and forgiven experiences to point out the chemical experimental evidences of some relational facts. Hoch [12] himself considers various issues about psychotherapy with drug: patient's expectations regarding psychotherapy, the ideal imagine of both the therapist and his technique, his preference for psychotherapies in conjunction with somatic help, the need of using psychotherapeutic procedures with a theoretical basis in accordance to patient's ideas on mind's working.

Actually nobody rejects psychotropic drugs' use with psychotic patients. The main problem is *when* and *how* to use them.

We may say that the use of therapeutic instruments, including the pharmacological ones, and their importance in respect to the psychotherapy depends both on the kind of patient and on the therapeutic project we have about him.

I agree with a new thesis of Cerrini and Galli [13], that manipulations are present every time the patient tries to provoke specific situations with the therapist, like a sort of "evidence" in the object choice process: "the patient tries to provoke certain behaviors in the therapist, fixing up himself to the perception that he has of his reaction".

About countertransference issues I find that Sandler's "resonance of role" concept [14], that must be understood as a compromise between therapist's personal inclinations and the accord with the role that the patient is imposing him, with the obvious advice that not all the countertransference responses derive from the role imposed by the patient.

We can say, about the question that between who prescribes drugs and who does psychotherapy there is a distinction, that the drug should be managed from the doctor himself with those patient with prevailing neurotic levels, while when the patient presents a predominance of

psychotic parts it is better to keep the two roles distinguished, because under these conditions, that are very frequently difficult both for the patient and the doctor, it is preferable to create collateral transference relationship. In these cases, it's important, even if doing so can create other relational problems, to warrant a sort of post-consultation between the therapists.

Some Authors [15] stated that using long-acting drugs instead of daily administrations it is possible to create situations in which therapist and patient set each other in a "market of deceit" where "patient's childish conflict mobilizes therapist's conflicts because the therapist is not subjected to a masochist dimension or to a fully omnipotent narcissistic fantasy soaked of enterprise while the activation of patient's mechanisms of defense are used for the control, paralysis and manipulation of therapist's object".

With the relational psychological elements list shown in Table 2 I will talk specifically about extrapharmacological aspects, without the pretence to summarize or complete the subject.

Typology of the pharmacological imaginary, its meanings and figurations in the relational scene are shown in the left side of the table; some aspects of the drug-mediated interaction are described on the right side.

Using the diction objectual lack we deprive drug of its subject, in other words drug does not establish a real objectual-relation in the sense of a relation between the subject and *his/her* object.

With the term "bodilization" I indicate the real presentation and replacement, by the drug, of a bodily function or of an anatomical piece. That occurs in patients which show an extreme somatic regression and it is perhaps even partly implicit in some forms of substance's dependence without intrinsic drug addiction aspects (*i.e.* diuretics or some cardiotonics). In this state of confusion imaginary, body and external reality are not distinguished: drug does not assume the form of a real object, but it becomes part of the confusive mixing appearing in more or less continuously and swiftly changing forms.

With "concrete object" I refer myself to an omnipotent thought function, to the magic of the healing or poisonous object; in other words I am talking about a magic exaggeration of the traditional medical model which states that the drug *is* what is missing. It is important to outline that some patients with evident omnipotence thoughts (some paranoiacs, obsessives and phobics with impulses) frequently experience drugs as healing objects: in effect they are good *placebo responders*.

The transitional object - we are now moving in a presymbolic area - is the one the subject interacts with as if it should be at half way between himself and the other person (typically a doll or a piece of material): the child attributes a great value to this object. In Winnicott's thought [16] this object contributes to the passage from the childish narcissism to the objectual love, from the dependence to the sèlf-confidence; it is the presentation of the experimental interindividual area, between thumb and rolly teddy-bear, between the oral erotism and the real object relation [17].

We can find transitional drug representation in regressed aged patients or, even, in agoraphobics (drops and pills in their pocket). It must be noted that both mother and child create the transitional object - as an analogy: patient and therapist - and that the well ending therapy is a reciprocal fulfillment.

Well known is the drug symbolization. It is to be remembered, from a psychoanalytic point of view, that the symbol involves loss' tolerance, because it allows throughout analogy or contiguity, the substitution of what has been lost in a way that the subject experiences as definitive. In the same psychoanalytic framework, drug symbols can be considered as part objects of relations with important persons.

The sign has something to do with semantic-sociocultural values related to micro and macro-social environmental influence and is consequently connected to the media influence too.

Tofranil's (imipramine) effect and signic value in sixties was certainly very different from the one it has today, even if it still can not be considered an absolutely out of date drug. We could also think about names as Ansiolin (diazepam) and similar or the antidepressive classification of some substances once used with other indications.

We can say, about the drug/mediated relationship configurations, that the psychotropic substance can be involved in a condition of real interindividual relation absence. This is what happens when the drug assumes an unobjectual role as we mentioned earlier regarding bodilized and confused object.

Drug can even be the pretext, the witness or the representation of a neglected doctor-patient relation: the drug *is* the relationship.

Much more frequently drug is used to establish a gap between the doctor and his patient which avoids wild and invasive collisions sometime producing intolerable anxiety. That more frequently happens when the mobilized experiences are clearly of a psychotic kind. The result, in Freud's language, would be a sort of typical oral dilution of the interindividual relation, dilution that is, at last, useful and sometimes necessary both for the doctor and the patient.

Table 2. - *Elements of drug's relational psychology*

Objectual lack	Absence of relation
("bodilization", confusion)	Denial of the relation
Concrete object	Relational gap
Transitional object	Perverse relation
Symbol	Therapeutic omnipotence check
Sign	Therapeutic alliance

The perverse relation is characterized by some expressions that we can reconduce, using Freud's language, to the sadic-anal constellation or, in Meltzer's theorization [18], some derivations of "confusion between good and bad". Drug's role can then be the one of a sado-masochistic instrument in its various expressions. This condition is much more frequent than one can imagine.

Some words about omnipotence check and self-love injury. On the one hand, some psychiatrists think that the use of drug is, when necessary, something like an insult; this produces more or less intense countertransference motions. On the other hand, persisting, even if the patients talks about side effects, the drug's use, can bring not only to iatrogenic evidences (for example the increase of a drug's dose being unpleasant and inefficacious) but even to the possible establishment of a perverse relation, in any case to the loss of every kind of therapeutic solidarity.

I include my considerations mentioning the drug as a therapeutic *witness*. We can, at least in part, conceive the drug as a way of taking care of someone, as a witness of therapeutic alliance, of that essential area of any doctor-patient relationship and of any psychotherapy, in which there are both the patient that wants to be cured and the doctor that wants to cure. The hurted man mentioned in the good Samaritan's parable is not only medicated and taken in charge, he *is then taken care of*, as literally the evangelist says (Luca 10, 34-35); that's the only way in which we can avoid the possibility of getting on relief of pains and also to become poor after twelve years of useless treatment how Luca himself outlines (Luca, 8-43) in the Emorroissans evangelic passage.

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