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The weakest link: competence and prestige as constraints to referral by isolated nurses in rural Niger

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Abstract

Background: For a health district to function referral from health centres to district hospitals is critical. In many developing countries referral systems perform well below expectations. Niger is not an exception in this matter. Beyond obvious problems of cost and access this study shows to what extent the behaviour of the health worker in its interaction with the patient can be a barrier of its own.

Methods: Information was triangulated from three sources in two rural districts in Niger: first, 46 semi-structured interviews with health centre nurses; second, 42 focus group discussions with an average of 12 participants – patients, relatives of patients and others; third, 231 semi-structured interviews with referred patients.

Results: Passive patients without 'voice' reinforce authoritarian attitudes of health centre staff. The latter appear reluctant to refer because they see little added value in referral and fear loss of power and prestige. As a result staff communicates poorly and show little eagerness to convince reluctant patients and families to accept referral proposals.

Conclusions: Diminishing referral costs and distance barriers is not enough to correct failing referral systems. There is also a need for investment in district hospitals to make referrals visibly worthwhile and for professional upgrading of the human resources at the first contact level, so as to allow for more effective referral patterns.

Introduction

In the 1990s the district approach became the backbone of health policy in many African countries. The basic assumption was that access to health services, especially in rural areas, would require a two-tiered system. A network of health centres would offer proximity care of relatively low technology, while district hospitals would provide a backup for patients referred by the health centre [1-5]. The division of labour between the two complementary and easily recognisable levels seemed a rational and cost-effective way of dealing with the health care problems of the rural poor [2,6,7].

Evidence for effective complementarity between the two levels is scarce [8]. On the other hand there is ample, if anecdotic, evidence of the failure of referral systems to live up to expectations. Referral systems are a matter of software, and much more difficult to establish than physical facilities. Very little documentation exists on this aspect of the implementation of the district approach. Still, referral

systems get most of the blame when health districts fail to deliver positive results [9-11]. Studies on maternal health in particular readily blame inadequate referral systems for the failure of districts to reduce maternal mortality [12-21].

The malfunctioning of referral is usually analysed in terms of either the need for standardised guidelines and criteria for referral, [22-27] distance and transport, [28-30] or financial barriers [31-35]. Fewer studies concentrate on the socio-cultural barriers [36,37]. A different constraint is that of the relational factors involved: the nurse-patient-family interaction at the moment of the decision to refer a patient.

Referral decisions are not just a matter of technical or organisational considerations. They also involve emotions, stress, fear and anxiety, on the part of the nurse or doctor as well as on the part of patients and their families [38,39]. These factors have been documented in the industrialised world [40-47]. They probably explain malfunctioning in cases where factors like distance or other barriers play no major role [48-50]. They have not been described and are usually ignored in an environment where often much more is at stake: that of the referral to a hospital in rural Africa.

As in many other parts of rural Africa, the referral system in Niger exists on paper but hardly in practice. There are few referrals apart from obvious emergency cases. There is no doubt that many patients who would benefit from a referral are either not referred or do not comply timely. Patients who get to the hospital often arrive after considerable delays, and are only a fraction of those that should arrive. For example, the number of women arriving during childbirth with a life-threatening condition requiring a major intervention is less than 10% of the low-end estimates of the need [51,52].

The failure to timely refer patients to district hospitals is the end-point of a difficult decision-making process that involves the health centre nurse, but also the patient and the community. This paper explores the complexity of this interaction, driven by the diverging expectations of health centre nurses, patients and health system managers.

It shows that if part of the failure to adequately refer the patients who need referral has to do with deficits in technical and organisational competence of the nurses, another part is related to their capacity to deal with the human and relational aspects of the referral situation. Nurses are reluctant to follow the standardised referral instructions – because they expect no major benefits from referral, but also for fear of losing face. Patients are afraid to be referred and nurses lack the communication skills and flexibility to overcome the clients reluctance. Their professional background does not provide them with the flexibility required to deal with the complexities of the referral situation.

Context and data sources

In order to understand the nature of the constraints to referral that relate to the interaction between nurses and patients, information was gathered and triangulated from three sources in two rural districts in Niger: first, semi-structured interviews with 46 nurses; second, 42 focus group discussions with an average of 12 participants – patients, relatives of patients and others; third, 231 interviews with referred patients of which 215 (93%) had complied with a referral and 16 (7%) had not. A social scientist and a last year medical student, familiar with the local language and culture and specifically trained for this work, conducted these interviews. The focus groups were conducted in 2 different cultural zones and villages were selected according to distance to the health centre and to the district hospital, explaining the relatively high number of focus groups. Culture or distance did not significantly influence the content of the dialogues though.

Interviews were semi-structured, and looked at the following dimensions: understanding of a two-tiered health system for both the health professional and the community, its importance, understanding of the referral system as a process and as a social event, barriers for accepting a referral, barriers for proposing a referral, the population's perception of the referral process and patients' feelings and experiences about their referral.

The study was conducted in Ouallam and Tahoua. These two districts are among the poorest in one of the poorest countries of the world. Niger is one but last, just before Sierra Leone, in the Human Development Index and the Human Poverty Index [53]. Infant and child mortality score very high. According to the Demographic and Health Survey (DHS) of 1998 risk of dying before age five was around 273, slightly down from the 300–350 levels of the 1980s. Forty percent of children under five are moderately (-2 SD) and 15.4% severely (-3 SD) below expected weight for age. Stunting is severe in 20% of children and emaciation is moderate in 14 and severe in 3.2% of all children. Malnutrition in Niger is at least 25% worse than in neighbouring Burkina Faso, Benin or Mali [53]. The population in the 2 districts (approximately 270.000 and 350.000 inhabitants) is scattered in a huge territory with 25 rural health centres at an average of 60 km from the district hospital. Only 29% and 42% of the respective populations live within 5 km from a health centre. Going to the district hospital is quite an undertaking: there is almost no transport and there are no tarmac roads. Travelling to the hospital costs a lot of money, often the equiv-

alent of several times a household's monthly income. There are efforts in the 2 districts under study to upgrade the hospital and to facilitate evacuation of emergencies – a/o through a radio and ambulance system.

There are usually two nurses per health centre in Niger, but norms are not always respected and in up to 40% of cases there is only one. These nurses typically have had two or three years professional training after three years of secondary education. Education in Niger is generally of poor quality. They work under difficult circumstances. They are very isolated, in terms of distance and transport possibilities, in terms of communication with their hierarchy – supervision is rare and not supportive – but often also linguistically and culturally. They are often posted in areas where they do not know the local language. Many are ill-prepared for life in a rural, illiterate society. For several years now nurses have been working with guidelines that define which patients should be referred.

Results

Reluctant to refer

Nurses in Ouallam and Tahoua refer few patients: only about 0.5% of their health centre clients. Only 2/46 nurses (4%) seemed to understand the rationale for structuring the system in two levels. All acknowledged a health centre-hospital gradient in technical resources, but few saw real differences in clinical competence between health centres and hospitals. Four nurses (9%) said that they only considered a referral "when surgery becomes inevitable". Others would only refer a patient after having "proof that no drug at their disposal would avoid the referral of the patient". About 20% explicitly defined referral as "what is done in case of shortage": lack of streptomycin, slides for sputum exams, or needles for a lumbar punction. Making ampicilline, gentamycin, dopamine, furosemide, and a vacuum extractor available would "reduce referrals". They had no reservations about their own competence and did not consider the possibility that the Ministry of Health may have had reasons for not making these drugs available at their level.

One could expect nurses to be more inclined to refer when the patient is unlikely to refuse, particularly in the case of patent emergencies [35]. Most health centre staff (84%) spontaneously differentiated between emergency evacuations and referrals of 'cold cases'. In the case of patent emergencies, need and user-demand coincide. Nurses seemed to have no problems to propose a referral on such occasions. They seemed much more reluctant in cold cases where transport, money and traditional beliefs were more of an obstacle. All could give examples of emergency referrals from their day to day experience, but not of cold cases. Examples of cold referrals included two patients with lipomas, four with a hernia or a hydrocele, two with prostate problems and two with a prolapsed uterus. But there was also a patient with severe ocular trauma and one who had not improved two days after an accident – i.e. cases one would rather classify as non-recognised emergencies. The average time since the last cold referral was 5 months (ranging from 3 days to 3 years). Even allowing for recall problems it is clear that cold referrals are rare events.

There is unambiguous evidence that nurses often fail to apply referral guidelines – for lack of competence or other reasons. For example, a patient with a 10% haematocrit after a postpartum haemorrhage may be treated at the health centre with oral iron and folic acid.

More than 80% of the nurses argued that compliance with the integrated management of child's disease programme guidelines would increase the number of referrals to an unacceptable level. "The decision trees do not consider the specificity of rural health centres. Rural health centres cannot refer in the same way as in town. Certain schemes tell us to refer in cases where changing drugs would be enough to cure the patient". "90% of all children show signs of malnutrition; we cannot refer them all!" Most nurses say they often disregard referral instructions, some say that they 'never' follow them: "If we were to follow the instructions, we would be referring 50% of our patients", and "the hospital would be overwhelmed".

The referral instructions were clearly seen as demeaning: "The decision trees disable people from thinking properly", and "If we were to do what (the management) says, we would become a mere entry point for hospital treatment". Referring a patient is apparently seen as a threat to the nurses prestige: "If we'd respect the instructions, we'd lose all credibility in the eyes of the patients"; "to refer too many patients would mean that we are not competent and so we will lose prestige in the eyes of the population." These statements were clearly emotionally charged. Suggestions that patients may at times be kept in the HC rather than referred out of fear of losing face provoked reactions ranging from bewilderment to violent denial: referring was a technical matter and prestige had nothing to do with it.

It should then be no surprise that nurses prefer to keep their patients 'under observation' in the health centre as long as possible, often beyond what is reasonable: in one instance a semi-comatose patient with meningitis, convulsions and high fever, lay dying in the health centre with no other treatment than the 5 g chloramphenicol given three days before. Regulations allow them to keep their patients for a maximum of 24 hours, but are often not complied with. In Ouallam, 119 out of 125 such patients (95%) stayed for more than 24 hours. Only 5 were subse-

quently referred as 'cold cases' and not a single one as an emergency, but 5 (4%), a grossly underreported figure, died in the health centre. Keeping patients 'under observation', 'hospitalising' them as it was labelled by the nurses, generated a lot of prestige. The cost in terms of missed opportunities was downplayed and rationalised by saying that "there is nothing of what the hospital does that I wouldn't be able to do myself".

Unwilling to be referred

Low expectations and fear

The focus groups showed that the population understood that it was not possible to have a hospital in every village, that health centres would not offer the same possibilities and that occasional referrals would be inevitable, e.g. for caesarean sections. On the other hand, participants made few distinctions between health centre nurses and district hospital doctors. They used the same word ("Lotokora") for both, and saw no competence-gradient, only one in resources: "Health centre staff is competent, but they do not have all the necessary drugs". The consequence is that they felt "the nurse at the health centre should always try something before referring".

The patient interviews give a slightly different view. Thirty-eight percent saw the hospital, the "older brother", as more competent given its superior resources, but also because of the superior skills of the doctors. For 62% however, it was merely a question of means, not of skills. They also defined the referral system in terms of a system failure, specifically in the context of absence of the staff or shortages of drugs. Referral was seen as a logical response to local difficulties. This notion seems to be reinforced by the attitude of the nurses, with their explanation in terms of "I cannot take care of you here because I do not have the proper drugs".

For those in the focus groups or in the patient interviews who acknowledged differences in skills, these were not perceived in the sense of a hierarchy or a pyramid, but as a particular instance of the differences every person is born with. There was a clear analogy with local traditional healers, whose different individual competencies are also readily recognised. When traditional healers fail, the patient simply tries someone else, with different skills, but without a referral to ensure continuity of care. It is then not surprising that these rural populations perceived referral in the formal system as a proof of failure. However, and contrary to the perception of the nurses, failure had no connotation of blame. In focus groups and interviews alike informants accepted that "all human beings have limits". Very few mentioned that a referral may also indicate ill-will or incompetence on behalf of the nurse.

This considerable respect for the nurses' opinion has to be understood in the context of the hierarchical relation between the health staff and the patients. The nurse, who enjoys a high social status in the rural community, is respected for his "authority in the matter": it is someone whom "one has to obey". Referrals are emotionally highly charged events. All focus groups repeatedly described referrals as a frightening experience for the patients: "a referral means death!", but likewise "refusing a referral will bring death". Patients were also said to fear the unknown ("they receive very little information") and to be afraid of being "insulted" by the hospital staff because "they do not know how to behave and they do not understand procedures".

The interviews with the referred patients confirm this impression of referral as a frightening event. Sixty out of 231 interviewed patients (26%) experienced the referral with equanimity, "relying on God", and 85 (37%) said they were rather relieved when the nurse proposed a referral. But 72 (31%) were already worried before they came to the health centre. They were expecting to be referred because they had understood the seriousness of their illness. Fifty-one patients (22%) clearly indicated that the referral had frightened them: "If you are referred, it means that it is serious". All in all, 48% of referred patients expressed rather strong negative emotions.

Barriers

All parties were much aware of the obstacles facing patients who have to go to the hospital, and in the first place the hurdle of finding transport and of paying for it. All the focus groups – as well as the interviewed nurses and patients – insisted on the costs: to get to the hospital, but also for bribes and for the return journey. They (correctly) considered that these items were more of an obstacle than the actual cost for treatment at the hospital.

Referral does not only mean transport costs for the patient. Relatives have to go with the patient and need accommodation and food. A referral is a social event in a rural community. The patient's family and friends are involved in the referral decision and its management. All focus groups indicated that the decision to evacuate a patient is taken by several persons: the parents, the husband, TBAs, village health workers, traditional healers or the village chief may have their say. Especially in cases of emergency evacuations, the patient is hardly drawn in the discussion, partly because he is too ill, partly because it is the others who will have to face the expense and the effort of getting him to the hospital, and of visiting and supporting him. "Not visiting a sick person can be interpreted as if you would be happy about his death". This was a major financial and social investment: transport, housing, a (small) donation to support the treatment of the patient

and the opportunity cost of leaving their fields during the wet season. To keep patients 'under observation' at the health centre "makes visiting of the patient easier", and is cheaper in all other ways.

Focus groups clearly expressed the trade-off that is made between expected costs and expected benefits and risks. Focus groups considered referrals of elderly people or children, considered at high risk of dying, were less acceptable than those of young adults. It was important to be buried in one's own village, and transport of the deceased was particularly expensive. The nurses (56%) are aware of the age preferences of the patient's environment (although 60% claim they themselves are neutral and have "no age preferences" – or, if they have, admit to a negative bias concerning the elderly (20%) and a positive in favour of the very young (16%)).

Ensuring compliance and convincing patients

For all these obstacles, the focus groups all said they always "accept" referrals by the nurses. Only factors beyond their control, such as lack of money, would make them decide otherwise. A sizeable minority of the nurses (8/46) also said patients "never refuse" a referral. Most specified that emergency referrals were not normally refused, although some actually gave concrete examples of the opposite.

Half of the nurses found it "really difficult" to convince people to present to the hospital if there was no emergency, and told of long delays, at times with disastrous consequences. The other half said it was "easy" to convince people to accept a cold referral, and easier still when the patient got worse: there is some doubt as to whether they were really talking about cold cases.

Nurses explained refusals to comply – clearly expressed refusals, or patients who agree but simply do not go – in different ways. For 15 out of 46 it was a matter of practical obstacles: e.g. the absence of a minder in town, someone who lives near the hospital and can receive and guide the patient. For nearly 50% it was a question of "ignorance" and "irrational traditional beliefs". A few mentioned the role of season or that of the family.

One third of the nurses (15/46) said that they "force the patient" or that they "give the referral letter and the rest is their problem". The majority (67%) "try to convince" reluctant patients, directly or through their family. In doing so, some health workers said they try to "scare the patient" into acceptance or highlight the consequences of waiting ("you should not wait until it complicates further, it will cost you much more to treat at that moment"); about as many said they do the opposite, and try to reassure the patient by saying that "the hospital does not kill". Not one nurse talked about understanding the patient's predicament.

Nurses showed little awareness of the strength of the emotions of referred patients and their relatives. Only 5 of the 46 interviewed nurses spontaneously alluded to these fears, in general terms such as: "I tried to calm the patient down". Not one of the nurses was able to describe the emotional and social aspects of the referral process. They seemed ill-prepared, unwilling or unaware of the need to deal with the anxiety generated by referral. Twenty-four percent even reported that they would deliberately scare the patient in order to convince him or her to accept the referral. Nurses were candid about their own callousness: they saw no problem in telling a patient that "if you refuse the referral, that's your own business" or, in case of refusal to "just ask them to write me a note which discharges me of my responsibility".

If one extrapolates from what is known about doctor-patient interactions in referral situations in industrialised countries, an important aspect in dealing with the associated anxiety is information about the reasons for referral, about the risks, and about what will happen concretely in the institution where the patient is sent [54-56].

According to the focus groups, nurses just tell patients that they need to be referred, without further information. Many expected no more. Less than half the groups expected some information on the reasons for referral, on the circumstances or practicalities, or on the likely procedures at the district hospital, but not directly from the nurse: "It is the (referral) letter that talks", "He gives the paper, and that contains everything". Focus groups do not, however, characterise communication as bad or insufficient. The health worker speaks with legitimate authority.

At the individual level, referred patients qualify this picture. Fifty-one percent of referred patients interviewed (118/231) did not know why they were referred, but said that "the nurses told me simply to present to the hospital, so I obeyed". Of the 49% who said they had been informed to some extent 65 had received some specific information about their illness, 12 had asked for a referral themselves, and 72 had been aware they were in a bad shape and were not surprised by the referral – it is unclear whether they did get additional information on the reasons for referral. This picture emerging from the patient interviews confirms the focus groups' indications on inadequate information.

Interviews with nurses also confirm the impression given by the focus groups. Most nurses would "simply tell the patient that he cannot be treated locally", or, at times, talk

about the need for a supplementary laboratory exam. Only 5 of the 46 interviewed nurses spontaneously mentioned that they would also talk about the risks of refusing the referral with 'cold cases'. None mentioned other topics covered in the conversation with the patient, a strong indication that dialogue is usually minimal. Only when prompted nurses said that they "explained the reasons for referral" to the patient or the family and informed them about the financial aspects and the procedures in the hospital. Hardly anything supported this statement when they were asked to give examples. It may be true that nurses at times do provide some information, but it is most probably *ad hoc* and unsystematic. Even when prompted, only 5 of the 46 nurses said they reassured patients during an emergency evacuation and 10 in case of a cold referral (this may seem contradictory, but in an emergency patients and their family are usually less surprised about the referral proposal and require less reassurance in order to obtain compliance). Such lack of responsiveness to the patient's legitimate expectations of information is not an isolated phenomenon and has been described elsewhere in Africa, both in rural and urban environments [49].

Discussion

Authoritarian nurses and passive clients

In a superficial reading much of the nurses' reluctance to refer seems due to the lack of marginal benefit to be derived from referral to a hospital that, apart from surgery, cannot do much more for the patient than what health centres can do. If nurses work by trial and error to avoid referrals, they do not really think that the hospital can do much better. They are not completely in the wrong. To date only 3 out of the 33 district hospitals in Niger provide surgical care. Most cannot transfuse blood or give oxygen. District hospitals only did 79 major obstetric interventions in the whole year of 1998 [51]. In the best of cases there are 2 doctors in the district; they are regularly both absent for other duties. Laboratory and X-ray facilities are rudimentary. The majority of deliveries in hospital maternities are attended by TBAs, not by professional midwifes. Obviously, hospitals under such conditions often do not make the difference with what health centres can offer closer to home, and without the costs and other risks.

Still, there seems to be more to the nurses' reluctance than their low opinion of hospitals. The patient-nurse relations is characterised by authority and passivity.

Nurses in their health centres are a local elite that looks down on a population considered "ignorant", an attitude that is reinforced by their isolation. The population looks up to them as representatives of the 'State', representing a different culture and often perceived as hostile to traditional values [57]. Nurses will not give up this privileged position easily. With their fragmentary understanding of scientific medicine and its uncertainties they are particularly ill-prepared to deal with the complexity of the referral situation.

Emergency conditions may be stressful but the options are clear and decision is fairly straightforward. For cold referrals negotiation is more complex and requires multiple trade-offs between cost, fear, effort, acceptability for the family and possible outcome as well as the nurses' personal prestige, clinical pertinence of the referral, reaction of the hospital and superiors. This requires motivation, time and willingness to explain the situation to the patient, the ability to understand the patient's wishes and perceived obstacles, and a good deal of communication skills that are patently lacking [58].

It is then understandable that the patient's reluctance and the real transport and financial difficulties become an easy rationalisation for avoiding the complexity of referral. Nurses seem to have adopted the easiest strategy: to propose a referral only when no other solution can be envisaged and when the patient himself is also convinced. This is the case in emergencies, but rarely for cold cases [35].

Contrary to industrialised countries where patients have a voice in the referral decision, [59-61] patients in Niger are passive; only relatives and friends have voice, but do not always act in the interest of the patient. The nurse's authoritarian behaviour and the patient's passivity combine in a mechanical interaction without creativity, dialogue or even emotion. Nurses have no qualms saying that "if a patient refuses a referral, that's his (the patient's) business", and of no concern to the nurse. With poorly developed sense of responsibility and few or no mechanisms for holding staff accountable there are few prospects for a 95% illiterate population to change this situation rapidly. All health centres in Ouallam district, and plenty others in the country, have organised the population of their respective catchment areas into community health committees. These participate in construction works and are targets for health education. However, no sincere dialogue between the staff and the population ever takes place, partly because nurses are not keen on power-sharing and partly because they are ill at ease with an unstandardised process with an outcome that is not predictable. The result is a vicious circle of authoritarianism and passivity, of fear of losing face and low expectations superimposed to the already important transport and monetary barriers for referral. Further standardisation of referral criteria is unlikely to change this situation.

Conclusions

Beyond standardising referral and overcoming distance barriers

The failure of referral systems in sub-Saharan rural Africa is often attributed to transport problems and financial barriers. In Niger these problems are real and important, but tell only part of the story. Nurses find themselves in the ambiguous situation where the population is reluctant to be referred because of numerous barriers like transport and costs involved, but where their reputation is also at stake. Authoritarian attitudes and overconfidence in their own capabilities then substitutes for difficult negotiations with a population that does not think according to the technocratic referral paradigms of division of labour and hierarchy of competence and skills.

Apart from the issues of roads and communication, tackling this failure will probably require a two-pronged approach: investment in the district hospitals and professionalisation of care at first contact level.

There is a clear case for investment in the district hospitals, and particularly in their human resources [10,62,63]. This is not happening at the present moment. Policy makers and specialist doctors are reluctant to invest in further training of general practitioners: for example, training in basic surgical skills was halted after a mere two training sessions in 1995–6. The result is that at this moment only 3 district hospitals out of 33 (each catering for an average population of 200,000) have a district medical officer who performs surgery. Many not only lack the people but also essential services like blood transfusion, laboratory and operating theatre. Not until district hospitals have reached an acceptable level of quality will nurses be willing to refer patients and to convince them to make the necessary investment and effort to consult at the hospital. As the gradient between health centres and hospitals becomes more apparent to both nurses and population, it will become easier to overcome nurse and patient delays.

Part of the seemingly callous, overconfident and arrogant attitude of the health centre nurses can surely be attributed to ignorance and inability to deal with uncertainty. Most nurses are convinced they provide the best possible quality of care. Whether additional training can possibly reverse this attitude is a matter of speculation. Comprehensive care has to do with defining complex strategies or decisions in a participatory way for multidimensional problems, hardly something one could expect from the staff that is in place, given their low-level of training and education. It may be time to face the choice between retraining and upgrading present staff and radically changing the profile to a higher level of professionalism: there is a need for staff that are sufficiently self-confident to be able to refer without fear of loss of face.

Authors' contributions

All authors contributed to the design and writing of this paper, and read and approved the final manuscript.

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