

Les perceptions des femmes face aux risques sanitaires liés à l'utilisation des pesticides dans les pratiques agricoles à Korhogo (Côte d'Ivoire)

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Abstract

The use of pesticides is encouraged in lowland crops to improve performance. But the use of these chemicals poses increasing threats to humans and their agricultural production environments.

To shed more light on this situation, we decided to highlight the social perceptions that women lowland farmers in Korhogo have of the health risks associated with pesticide use.

This qualitative study was carried out from April to May 2022 on a sample of 40 people in four localities in Korhogo : Logokaha, Natiokobadara, Koko and Petit Paris. The social representation theory of J.C. Abric (1994) is the theory used in this study.

It emerged from these field surveys that, firstly, women's perceptions of health risks are a function of their social belief in pesticides and, secondly, the risks of illness to which women are exposed are due to the non-systematic use of protective tools and failure to comply with appropriate dosages during work.

Key words : perception, women farmers, pesticides, Korhogo.

Résumé

L'usage des pesticides est encouragé dans les cultures de bas-fonds pour améliorer les performances. Mais, l'utilisation de ces produits chimiques présente des menaces croissantes pour les humains et leurs environnements de production agricole.

Pour mieux éclairer ce constat, nous avons décidé de faire ressortir les perceptions sociales que les femmes agricultrices de bas-fonds de Korhogo se font sur les risques sanitaires liés à l'utilisation des pesticides.

C'est une étude réalisée d'avril à Mai 2022 à caractère qualitatif sur un échantillon de 40 personnes dans quatre localités de Korhogo à savoir : Logokaha, Natiokobadara, Koko et Petit Paris. La théorie de la représentation sociale de J.C. Abric (1994) est la théorie qui est mobilisée dans le cadre de cette étude.

Il est alors ressorti de ces enquêtes de terrain, dans un premier temps, que les perceptions que les femmes ont des risques sanitaires sont fonction de leur croyance sociale aux pesticides et dans un second temps, des risques de maladie auxquels les femmes sont exposées sont dus à la non utilisation systématique des outils de protection et au non-respect des dosages adéquats au cours de travail.

Mots clés : perception, agricultrices, femmes, pesticides, Korhogo.

Introduction

Côte d'Ivoire is located in West Africa and is a developing country. Indeed, its development is based on its economic boom, which is becoming increasingly dynamic and favourable. This economic dynamism is based essentially on agriculture, which accounts for a major share of the Ivorian GDP (Gross Domestic Product). In addition, the northern region of Côte d'Ivoire is subject to a contrasting Sudanian climate. Annual rainfall, which sometimes exceeds 1,000 mm, sustains a savannah that is sometimes dense with trees, sometimes degraded. The rains fall practically between April and September (M. Doumbia and E. Kwadjo 2009). There are therefore major disparities, with areas under heavy human pressure and sparsely populated areas that are sometimes devoid of people. Food crops are essentially based on sorghum, millet, maize, traditional lowland rice, recent rainfed rice and off-season yams. This agriculture, whether mechanised or not, is practised throughout the country (including less rainy areas) and in different environments. What's more, this sector of activity, like the Ivorian economy, claims to be inclusive. This agriculture is said to be sustainable because it takes into account socio-environmental and socio-health aspects. As early as 1960, in a bid to ensure water supplies for the population and for agriculture and livestock farming in the north, the Ivorian government set up a network of water reservoirs. Traditional Sénoufo agriculture in the north of Côte d'Ivoire, of an intensive type with its so-called 'village fields' directly adjacent to the village (well-defined fields 2 with or without dwarf and shea plantations and receiving manure) and its lowland fields, has therefore undergone profound change since

1945-1950 with the development of cotton and, from 1960 to the present day, with the construction of new dams. (Le Guen and T de Morais Luis, 2001). It should be noted that this type of farming is practised in this locality mainly by women. In Korhogo, more specifically in neighbourhoods such as Logokaha, Natio, Koko, Petit Paris, etc., women lowland farmers are increasingly exposed to health problems because of their regular farming practices and their socio-demographic characteristics, which are the focus of our study. Despite the risks they face, they expose themselves more. What, then, are women's perceptions of the health risks associated with the use of pesticides in farming practices in Korhogo (Côte d'Ivoire)?

1. Methodology

Analysis will be our option in order to shed more light on and understand why we opted for such a research topic. This study was carried out with 10 women farmers per district for the qualitative research, which we will find on the sites using the convenience technique. The sole purpose of this was to saturate the women's comments.

Survey techniques are the tools we have at our disposal for research, in order to collect data in the field. In our case, we used direct observation, documentary research and interview guides. It should be noted that the women farmers were chosen on the basis that they practised this activity full-time, compared with others who did so part-time. They are also better able to give us the information we need for our study. These farmers were recruited by convenience. The choice of this category of people guided us towards women who are regularly ill because of their regular use of the lowlands. For the qualitative approach, retranscription, thematic processing and the phenomenological approach were used to analyse and interpret the information. On the basis of all this, we selected the neighbourhoods where these practices are recurrent and where there are shallows in the town of Korhogo. These are Logokaha, Natiokobadara, Koko and Petit Paris.

2. Results

This section sets out to highlight the factors that explain lowland women farmers' perceptions of the health risks associated with pesticide use. These factors are of a personal nature, i.e. they are related to the relationship they have with pesticides, as they integrate ethno-cultural logics. In other words, we will give the reasons that explain their social beliefs linked to pesticides.

2.1. Year of experience of women farmers in pesticide use

The desire to see the relationship between these women and their workplaces prompted us to ask about their years of experience and the number of years they had used pesticides. Generally speaking, more than half of those surveyed (60%) had at least 10 years' experience of using pesticides, with a third (30%) having between 10 and 20 years' experience, and a tiny proportion (10%) having more than 20 years' experience of using pesticides. These results show that these women have been in the profession for many years and have a special attachment to their place of work. There is also evidence of an ageing intrusion of pesticide use into farming operations. A 29-year-old respondent from Logokaha C. W. said :

"I have been growing rice for years, I don't know how to do anything else apart from that, I used to do it with my mum when I got married, that's what I did to help my husband, and now I'm with my children and I show them too. Growing rice is like a legacy for my family".

These results show that women use little space, i.e. a small area, but use a lot of chemical inputs to increase yields. Most of them grow intensively. There are two possible explanations for the small area farmed by women in the lowlands. The first is gender, as most farmers are women. And they farm less than a hectare. The second is linked to the techniques used, which are still archaic and make it impossible to farm a large area. When asked, most of them did not know the exact size of their plot. T. Z., 32, from the Petit Paris neighbourhood, said: "I don't know the exact size of my plot, but as you can see it's not that big, and when it's like that I grow a lot in record time without getting tired because the plot is small".

In response to another question, she replied : "I grow a lot because I use a lot of fertiliser, which makes my crops look pretty and protects them". The number of years she has been growing lowland crops and using pesticides shows her attachment to them and her dependence on them. This dependence entails huge risks of health and environmental poisoning.

2.2. Women farmers' perceptions of pesticide use

Generally speaking in Africa, local perceptions of phenomena and practices are very much influenced by habits and customs, which in turn depend on socio-cultural groups. However, it should be noted that perception is particular and specific to an individual. Perception is characterised as the term used to get an idea, an image of a given object. Thus, according to M. Lalande and J.P. Tissier (1985), perception concerns the actions by which an individual, organising his present sensations, interpreting them and supplementing them with images and memories, opposes an object that he spontaneously judges to be distinct from him, real and currently known to him. The people surveyed give meaning to the use of pesticides. As well as being a purely technical object, plant protection products have a particular symbolic meaning for our respondents. In the same vein, a respondent from the Koko S. T., aged 41, said : "We use fertilisers because they allow us to produce a lot in a short space of time, and they also prevent insects from destroying our crops". This symbolic meaning is organised along two axes that give pesticides a dual dimension (functional and social). For some women farmers, chemicals are the least tiring way of weeding and ploughing their crops. In the same sense, herbicides replace machetes, dabas etc. The fact is that they replace the action of the soil with a simple application of herbicide. Others see pesticides as a more effective way of producing enough in record time. As a result, they cannot abandon the use of pesticides in their daily work. A 37-year-old respondent, Y. K. from the Petit Paris neighbourhood said :

"Our mums have been using them ever since they were little and they've always produced good harvests, so we're just copying the same thing to produce enough and, above all, faster".

She goes on to say : "It's a question of getting used to it, and it also makes our job easier, because we spend less money and energy to make a lot of money".

2.3. A social habit as a perception factor

All the respondents use inputs of all kinds (insecticides, herbicides, fungicides, manure, etc.). This practice is used by most lowland women farmers in Korhogo. All the women farmers surveyed used pesticides to protect their crops and ensure their profitability. The pests most frequently attacked were birds, agoutis, caterpillars, locusts and termites. The crops protected in the lowlands are rice and vegetables. Vegetables receive more maintenance and pesticide use than other crops in the lowlands of Korhogo because of their profitability.

The intensity of pesticide use was very high, and the risks associated with the use of fertilisers are empirical, based on criteria such as the smell, type, shape and effectiveness of the products used. There is also the unregulated use of pesticides by women farmers, who either ignore or do not consider the risks of poisoning. Added to this is the dependence of women farmers on agricultural pesticides and the health problems caused by ignorance or failure to consider the risks and the lack of training on the requirements for pesticide use. One of them, K. M., aged 26, from the Logokaha district, said : "I was born to find my mother and aunts using pesticides, so I do the same thing, and now that the world is changing, there are new fertilisers that are more effective and less dangerous than the ones we used to use".

3. Discussion

Representations are an individual's adherence to a set of statements or symbolic entities, and are linked to value systems. According to A. F. Binguimalet (2010), social representations, whatever form they take, have in common that they are a way of perceiving and interpreting everyday reality. For E. Durkheim (2002), belief is a fundamental object of sociology, and does not only concern the religious universe. Our investigations revealed that women farmers in Korhogo use plant protection products for four main reasons : firstly, to increase crop yields ; secondly, to improve the fertility of plots and combat pests;

thirdly, to make weeding easier; and lastly, because they consider them to be inherited. Farmers' perception of health risks remains low. All the women farmers surveyed have a basic understanding of the risks involved in the direct use of pesticides. They realise that pesticides can be a source of severe poisoning that can lead to death if the product is swallowed in large quantities. However, their perception of health risks is still focused on immediate effects such as coughing and skin and eye irritation during application. This means that they are aware of their exposure, but neglect or ignore the real danger of pesticides to their health, to that of others (family, friends, consumers of the products grown, etc.) and to their environment. Neglect and ignorance are indicators of the low level of farmers' perception of health and environmental risks. Our writings concur with those of A. M. Toé (2010), who states that the majority of farmers are well aware of the dangers of pesticides to their own health but ignore them. The use of chemical fertilisers in lowland farming by women farmers is supported by the work of A-M Izac and E. Trucker (1991). Trucker (1991). When the applicator observes no symptoms after a treatment, her perception of the risk becomes low. The use of Agricultural Pesticides (AP) is therefore becoming a fashionable trend, and is even used in homes to control insects (magnan ants) (Field data, 2022). Despite the many advantages of pesticides, farmers are becoming increasingly dependent on them. The idea of dependence is gradually taking root in the habits of women farmers. Farmers who have been using pesticides for many years are not setting a good example, because they use fertilisers without wearing PPE, on the pretext that they are not exposed to the dangers of using chemical inputs and that they know exactly the right dosage for each crop. In fact, most of the women surveyed had between 10 and 20 years' experience of using pesticides. In 1998, authors such as Baldi took stock of the state of epidemiological knowledge of the effects of pesticides on health, tracing the development of knowledge and hypotheses leading to the establishment of a link between pesticides and cancer. (I. Baldi et al., 1998). In addition, all the women interviewed expressed a dependence on pesticides. They felt that pesticides Without them, they cannot overcome the production difficulties they constantly face. The main issues are soil productivity (soil impoverishment and fertilisation), labour shortages, reducing the arduousness of farm work, increasing

yields, the quest for household food security, the fight against crop pests, weeding and making work easier, and so on. These farmers all affirm their inability to produce without pesticides. The use of agricultural pesticides is seen as a solution for increasing the quality and quantity of women's produce. However, far from being advantageous, it presents enormous health risks due to a number of factors. These risks concern the health of women farmers, food crops, wells and ponds, medicinal plants and the environment as a whole. A critical look at the use of agricultural pesticides has highlighted the low level of farmers' perception of health risks. J.C. Abric (2003) states that to speak of representation is to observe the world through social groups and to give meaning to one's behaviour through one's own system of reference, to adapt in order to define one's place within it. In view of the results, Sénoufo women farmers are not excluded from this vision of pesticide use.

Conclusion

The aim of this study is to analyse the social perceptions of women lowland farmers in Korhogo regarding the health risks associated with pesticide use.

To take account of this social reality, a study was carried out between April and May 2022 among 40 people in four localities in Korhogo. These were : Logokaha, Natiokobadara, Koko and Petit Paris. The study was purely qualitative and the data were analysed using Abric's (1994) theory of social representation.

The results showed that women's perceptions of health risks are a function of their social beliefs about pesticides. This state of affairs is reflected in the systematic failure to use protective tools and to comply with the correct dosages at work.

By highlighting the potential effects of pesticides on humans and the environment, the majority of women growers showed that they were unaware of the dangers associated with the frequent use of pesticides. In fact, due to negligence or a lack of resources and information, the appropriate PPE is not worn by women.

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