Short report on cluster studies

Introduction

Despite many decades of trying to improve health through health programming, most countries have failed to improve the health of those who are sometimes called 'the poorest'. Thus in many countries in Africa there have been significant improvements in health for many people, but not for the poorest. In fact it is widely recognised that the gap between the health of the poorest and that of the richest has been increasing, rather than diminishing in the last 50 years.

Part of the problem has been the failure to understand the conditions of life of those who are called 'poor'. The programmes aiming to alleviate 'poverty' have for the same reason failed to relate to the real lives of 'the poorest'. One of the difficulties has been the focus on resources, wealth and money to characterise those known as the 'poor'. The ways in which people interact with each other when they have little access to the main resources of water, food and employment has not been factored in to most development programmes. There has often been an assumption that those with poor resources have other forms of support – particularly through extended families – that help them to cope with life.

The 'cluster' studies carried out in partnership between the States of Katsina, Jigawa, Zamfara and Yobe on the one hand, and the PRRINN-MNCH programme on the other, have looked very hard at the factors that are most important in determining the survival of children in societies that have little access to important resources.

They were carried out in three phases:

1. Studies to establish whether all women and children were affected uniformly by poor health or whether only a small proportion of women and their children suffered a disproportionate burden of ill health. These studies were carried out in rural areas where almost all the people had the same kind of life pattern, the same religion, the same culture, the same access to health care, the same access to education and the same governing structures. Those who carried out the surveys could at first see little difference in the living conditions of the people surveyed.

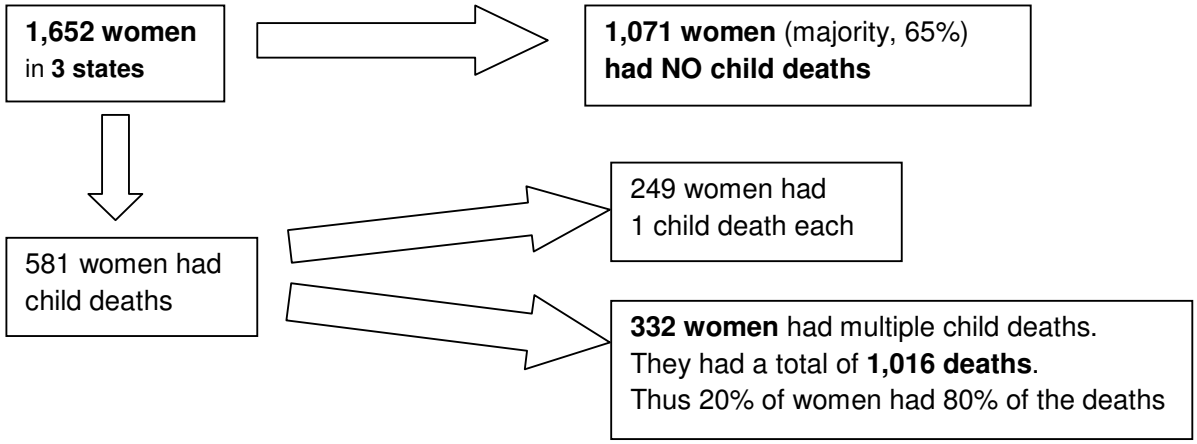
   These studies were also unusual in that they surveyed every single woman in each of the communities who had had at least one live birth. There was thus no possibility of sampling error. A total of about 2,000 women were interviewed. In each state the survey was done in one LGA.
2. Once it was found that there was indeed a large amount of clustering of child deaths amongst a minority of women, the second phase was to establish why such clustering existed. This was done through a mixture of individual interviews and focused group discussions.
3. The last phase was to discuss with local and state government, traditional and religious leaders what they thought of the results and the suggestions they had to improve the situation.

The findings

Clustering

In each of the 4 states there was a heavy skew in the distribution of deaths of children aged between 1 and 5 years of age. What is surprising is that the skew was very similar in the three states of Jigawa, Zamfara and Yobe[1]. The majority of women (about 65% in the combined states) had no child deaths at all. About 18% had one child death each, and the remaining 18% had multiple child deaths (about three child deaths each) – which meant that about 75% of all child deaths are suffered by less than 20% of women. And this is despite the fact that all the women are living in almost identical conditions, with the same health and other services serving their villages.

[1] In Katsina, a slightly different way of estimating child mortality was used, so although there was a similar skew, the results cannot strictly be compared side by side. This also means that the odds ratios, although similar in Katsina, cannot be compared directly with those of the other three states.



Thus, **in Jigawa, Zamfara and Yobe combined**, 1,652 women were interviewed. Of the 1,652 women, 1,071 had no deaths of their children aged 1-5.

Of the remaining 581 women, 249 had one child death each.

That left 332 women who had had multiple deaths of children. These 332 women had suffered a total of 1,016 child deaths between them (on average, about three deaths each).

Thus 20% of the women had had 80% of the deaths, whilst the majority of women had no child deaths at all.

Even more interesting was the fact that it was not whole households that were affected. Often it was found that one woman in a household had had several births but no child deaths, whilst one of her co-wives who had had a similar number of births had suffered several child deaths.

Almost all the 1,652 women (except for 50) in the three states had not had any education. 96% of them had used health services with their children, and so had no barriers to the use of services.

Why does such a small proportion have such high death rates?

There were four sets of factors that had a very strong correlation with multiple child death. In each case the statistical significance was 99.99% that the result was valid, and the odds ratio (the risk associated with each factor) was 2.26 to 2.65. In other words, these factors made a woman between two and three times more likely to suffer multiple child deaths.

1. **Support from relatives or in-laws.** Several questions were asked about the support women received from co-wives, their own relatives, adult children, in-laws, husbands and people outside the family. The questions on support ranged from moral support (support after quarrels), advice on health matters, looking after children, money, support after maltreatment. Amongst all these, it was the support from relatives and in-laws that counted for the most. Although the support from husbands was also a strong factor in lowering child deaths, there was a much stronger correlation between husband support and the appearance of the household, woman and children. This was because monetary support from the husband was not so important (the whole family has to receive help from relatives and in-laws). As discussed below, these appearances had very strong correlations with multiple child deaths. For relatives and in-laws, each of the measures of support mentioned above had approximately the same power. When all these measures were combined into one overall measure for support, women who reported no or very little support from in-laws or relatives were **2.26** times more likely than those with support to have multiple child deaths.
2. **Was there always someone older to care for the children?** Women who reported that their children had not always had someone older to look after them were **2.67** times as likely as other women to have had multiple child deaths.
3. **Is it easy to find support for you or your children?** There were two questions, one about whether it is easy for the woman to find support for herself, and the other to find support for her children when there were difficulties. Women who reported that there was almost no one to turn to for their own

difficulties were **2.65** times as likely to suffer multiple child deaths, and had the same odds when they could not find support when their children had difficulties.

4. **Appearance of woman, her children, her home.** Interviewers were asked to make their own personal assessments of the state of tidiness of the house, of the maintenance of the house, of whether the children were well cared-for, whether the children were well-fed, whether the children's clothing was kept repaired, the state of the mother's personal hygiene, and the extent to which the woman looked after herself. Each of these factors was highly correlated (negatively) with multiple child deaths. So if the score was high, there was little likelihood of child death. When a combined score for all these measures of appearance was put together, those who scored lowest on the combined score where **2.14 times** as likely to have had multiple child deaths. Some people might object that this measure is too subjective. The fact is that all the interviewers in all the states reported that while it was hard at first to detect differences, after seeing about 20 households they could detect them. It is remarkable not only that the results were similar across the states, but that they were so highly correlated with multiple child deaths. It was also interesting that appearance was correlated with support from the husband and relatives.

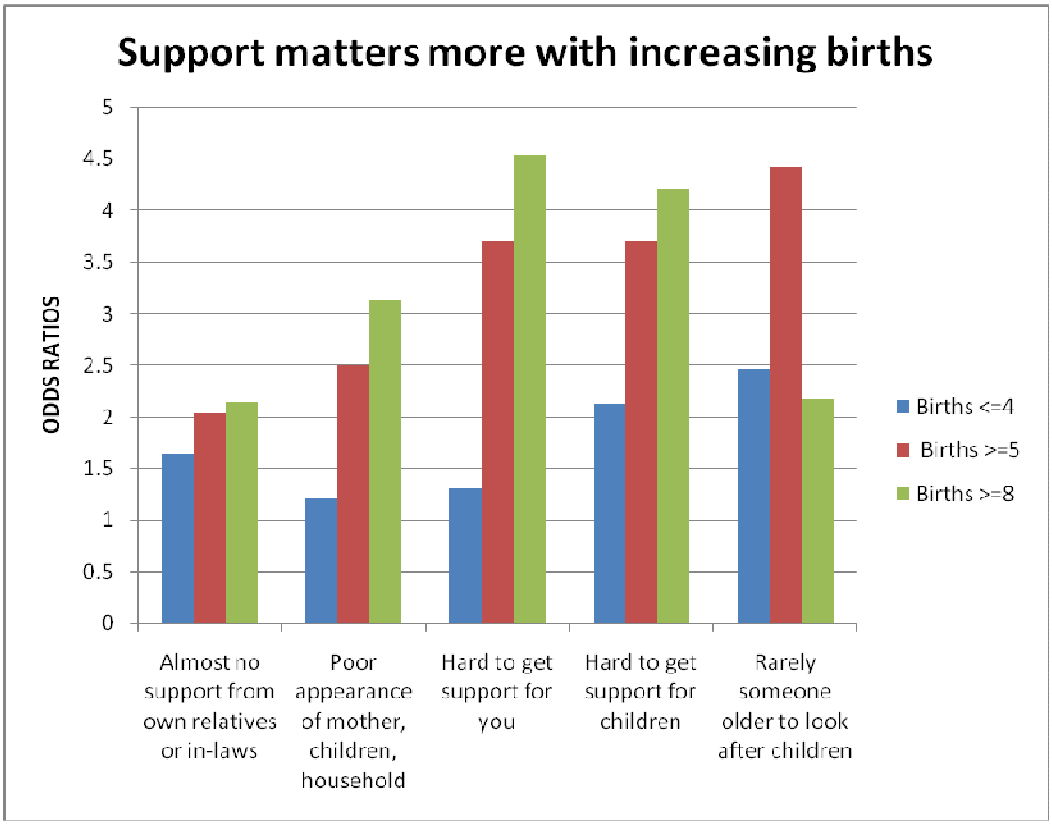
These scores for all the above factors were almost the same through the three states of Zamfara, Yobe and Jigawa. (They were similar in Katsina, but a slightly different scoring system was used in that state, so the comparison is not possible in an exact way). Of the three, Jigawa had the highest proportion of women having child deaths because this is so highly related to the number of children had by the woman. On average women in Yobe and Zamfara had 5 births per woman, while in Jigawa the average was 6 births per woman.

The correlation with number of deaths

It is very important to note that as the number of births to a woman increases, so does it become increasingly important that she has support. The following graph shows for each of the measures of support the increasing odds that she will suffer multiple child deaths if she does not have that support – with the important exception that after having 7 births the odds of having someone to look after the children **decrease** (although they are ***still*** more than twice as likely as others who have more support to have multiple child deaths), This is obviously because by the time you have 7 children, some of them can look after the younger ones. **Note the huge odds ratios of between 3.5 and 4.5** for women with 5+ births.

NOTE: When looking at the graph remember that an odds ratio of 1 means there is no correlation between the variables. Thus looking at the measure of poor appearance, it is immediately clear that this variable was not significant for women who had 4 births or less.

It is also important to remember that although the odds increase dramatically for women with many births, most of the measures of support remain important even for women who have four births or less.



Note on interpretation

It could be said that of course these measures are those of poverty. However, it is clear that while poverty may be a background factor, much more important is the support the woman is getting from others. Although support with money scored highly it should be noted that the other measures of support also scored highly. According to the enumerators, women who were living in households of a similar level of wealth could have very different appearance. The fact that this difference in appearance correlated very well with support from husbands and relatives made it all the more suggestive that when women have little support they may be more prone to neglect themselves, their children and their households.

It was said in one of the focused group discussions that it does not matter how much wealth you have. What is much more important is what you do with your wealth. So if a man is neglecting one of his wives, or if family money is going towards social occasions rather than food, then suffering will result.

Another common saying in the focused group discussions was that nowadays “the rich only help the rich”. This reflected a theme that society had changed considerably with the impact of new patterns of labour and a monetary economy. It was felt that the traditional Islamic values of mutual support had been lost for many people, and that when these values were preserved they were mostly within families – that the sense of communal support had diminished considerably.

Thus it is very clear that for the majority of women (about 65% for three states combined) the support mechanisms are working very well and they are able to bring up their children in health. However it is not the case for a minority.

The future

Discussions with local government, traditional and religious leaders revealed the same anxiety about the erosion of Islamic values in the society. There was complete agreement with the findings. The only surprise for some leaders was the extent to which the lack of support for some women was so closely associated with multiple deaths.

It is clear that the health services are not designed or even capable of addressing social issues as deep as these. It is for this reason that ministries other than health should develop strategies that will help in the

support of women – not only because of the association with child death, but most importantly of all because of social justice and development.

The situations of support described by the study are not ones that allow for short-term interventions, or simple donations of money or food for a few days. These women are facing the same lack of support every day, every year. Because of this, some other method that is longer term has to be found.

The immediate supposition that what is needed is more charity is perhaps too simple an idea. It entails identifying those who are most in need of support, and the problem with that is that very few people like to be identified as needing support. People often prefer dignity and respect to such identification.

One way round this is to see the situation as two-way. It is not only that the women should be identified, but that women who need support are kept informed of community resources that might be useful in times of need. Such resources may not require money, but they could require time devoted by people.

Thus the leaders in the Zamfara workshops discussed several feasible improvements.

1. They suggested that since traditional midwives visited almost all the homes of women in the village, and already performed many social functions, it would be relatively easy for them to know which women had most need of support, and the type of support that was needed. They would be able to inform women of communal resources that were being developed, who to see about particular problems, and where to go. They would be able to liaise with the Ward leader about particularly difficult problems(with the permission of the woman concerned). Regular meetings could be established between the traditional midwives and the Ward leader.
2. Sub-committees of the village development committee could become more thematic. Thus they could work on establishing methods of child care – perhaps using groups, or even asking which women in the village would be able to give extra child care support when needed. They could work on bringing groups together to establish common worries over which advice or counselling was needed.
3. There was a suggestion that Islamiya schools would provide a good opportunity for women to meet in a more structured way, with guidance from a teacher.
4. Another suggestion was that leaders be educated about the links between support and child death, and even the health of the mother.

There is also the question of for those who continue to deny women support, but this would require considerably more debate.

Finally, there is the very difficult question of those who choose to allocate resources for social or personal gain rather than for the maintenance of their family. It is of course vitally important for social respect, interaction and the support from others that social dues be paid and appearances maintained. It is even more important in situations of lack of resources and opportunity. It is this kind of dilemma that could be highlighted in the public discussions in community gatherings or the Islamiya schools. People often may believe (wrongly) that by trying to give their children a little less food it won't be too harmful. The trouble is that such chronic under-nutrition often leads to frequent infections and death of the child.

There are many possible activities that could be generated at very little cost and with very little (if any) training. People know, as they have known for thousands of years, what it is to provide support. They understand the dilemmas and contradictions involved, and they know that good will is often exploited by people who do not need support. What is now needed is to recognise its lack for particular women, and to help those women access support that is made more available on a communal and regular basis.

It is important to remember that whilst it is true that society has changed, by no means are all people changed into selfish, exploitative corrupt monsters. There are still plenty of people at every level of society who would like to work more for the benefit of others. It is just that they don't sometimes know how, or they haven't understood the simplicity of some actions that can mean so much to some people.

This way of thinking will go a considerable way towards making the dream of Primary Health Care a reality – a system of care involving a range of actors in addition to the health services, and that combines spiritual, social and physical well-being.

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