2 Young Lives: a mentoring scheme for pregnant teenagers

A feasibility study; October 2017 to September 2018

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2 Young Lives

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Background

Sierra Leone has an estimated maternal mortality ratio (MMR) of 1100 maternal deaths per 100 000 live births, the highest in the world [1]. However, for teenagers the risks are exacerbated, with an increased MMR for young women under twenty, and when disaggregated further by age, an even higher risk for the younger age group [2]. This was borne out in a rapid household survey conducted by Lifeline Nehemiah Projects (LNP) in the Kuntorloh area of Eastern Freetown in July 2015, where of the eighty-one adolescent girls aged sixteen and under who had given birth in the previous two years, eleven (13.5%) had died of maternal causes. This led to a qualitative study by Lucy November, a midwife researcher from Kings College London, funded by the Wellbeing of Women's International Midwifery Fellowship, which examined the causes of this high incidence of maternal death in teenagers [3].

Among the key findings was that pregnant girls are often abandoned or neglected by their families, particularly when being cared for by a non-parental adult – a very common scenario in Freetown. It is common for pregnant girls to then stay with a more distant relative or with her boyfriend's family, sleeping on bare ground without a mosquito net, being fed once a day in exchange for heavy domestic duties such as water collection and laundering. This lack of adult care or support often leads to delays in care seeking or complete lack of antenatal and delivery care, putting girls at high risk of death from untreated infections and anaemia, lack of birth preparation, and common obstetric risks.

It was hypothesised that having a mentor could mitigate against the risks of maternal and infant mortality and morbidity in pregnant adolescents and their babies. A review of the determinants of delivery service use identified low maternal age as a determinant for not accessing skilled care for delivery [4], and evidence from other community projects in Freetown indicate that having an advocate when accessing health care helps to reduce some of the barriers such as disrespectful care and informal charges. There is strong evidence that connectedness with an adult, be it a parent or a non-parental adult, appears to be foundational for adolescent health and well-being more generally [5-8], including delaying rapid second pregnancies [9].

The mentoring scheme; 2 Young Lives

Lifeline Nehemiah Projects, a local non-governmental organisation training and mentoring young people in vocational and life skills, started a pilot mentoring scheme in October 2017. Three local women were recruited as mentors and an LNP staff member as co-ordinator. The role of the mentor is four-fold; helping girls to re-establish family connection and support; encouraging health seeking behaviours and

advocating for respectful care at clinic, in labour and in the postnatal period; providing practical advice and support with parenting; and providing support and training in a small business and to re-enter education or vocational skills training. Mentors were expected to see girls at least weekly and ensure that they provided opportunities for confidential 1:1 discussion. Each mentor initially recruited three pregnant girls from their community by word-of mouth. Initial training was given which included the use of a pictorial maternal and infant health resource developed by the Welbodi Partnership. The co-ordinator communicated with the mentors by phone and on sequential Saturdays visited the mentors in turn, who gathered their mentees for the visit. On one Saturday per month, the mentors and mentees gathered at the LNP compound to cook and eat together, with input from a visiting speaker. Each mentee was also given a small business start-up fund and supported to run a small business to allow her to eat well and prepare for birth. Data collection forms were developed in order to build a quantitative evidence base for the effectiveness of the intervention.

Evaluating the mentoring scheme – a feasibility study

A feasibility study was funded by the Medical Research Council (MRC) through the Kings Health Partners Challenge fund with the aim of evaluating the mentoring scheme, andcontributing to improving health and educational outcomes for young mothers and babies in Freetown.

Aims of the feasibility study

1. To establish whether the strategy for recruitment of pregnant teenagers is equitable, recruiting girls with multiple disadvantage.
2. To establish the acceptability of the mentoring scheme to young women and their families, mentors and health workers at peripheral health units; and to identify barriers and facilitators to successful implementation, which could then be used to improve the implementation of a larger scaled project.
3. To establish whether the data collection methods and tools are fit for purpose.

Methodology

This study used a mixture of qualitative and quantitative methods; for qualitative, a focus group and individual interviews with girls at various stages of the mentoring process, interviews with mentors at the start of the scheme, after 6 months and after 12 months, and interviews with health workers. For quantitative, the data collection forms were analysed, of collected information on health and social issues, including health seeking behaviour, birth data and information on feeding and immunisations. Ethical approval for

this study was sought from Kings College London ethics committee (ref HR-17/18-5334) and from the Government of Sierra Leone ethics and scientific review committee.

Results

Quantitative data

Of the 22 girls mentored during the piloting year, 20 had given birth by 09/11/18. One miscarried and one has not yet given birth. All the girls accessed a full package of antenatal care at one of two local PHUs. 19 gave birth in local peripheral health units (PHUs); 1 girl gave birth at home with her grandmother who was a retired health worker. All girls and babies survived their births. Two girls were transferred from a PHU to the main referral hospital, Princess Christian Maternity Hospital (PCMH); one following an eclamptic fit and one for postpartum haemorrhage. Both mums and babies survived. Two girls moved from Freetown to the provinces after their births and were not mentored postnatally. Of the 18 girls mentored postnatally, all breastfed exclusively. Of the babies who are over 6 months, all but one were exclusively breastfed to 6 months; 1 supplemented with water. All babies received recommended immunisations.

Qualitative data

The following themes were identified under the headings of the main aims of the evaluation.

Major theme	Minor themes		
Recruitment to scheme; is it equitable?	*Recruitment methods and criteria*	*Disability and orphan status*	*High levels of poverty*
Mentoring support; is it acceptable?	*'Being driven' and reconciliation*	*Monthly gatherings and peer support*	*Mentors' experience*
Supporting small businesses	*Mentor's role as business advisor*	*Effectiveness and sustainability*	*Financing futures*
Data collection	*Assumptions of literacy*	*Need for data vs excessive paper work*	*An iterative process*

Recruitment to scheme; is it equitable?

Recruitment methods and criteria

Different mentors had different strategies for recruitment. M1 lives near to a water pump and could see the queue of young people waiting to fill containers from her veranda. When she saw a girl who was pregnant, she spoke to her about the project and invited her to come and meet the co-ordinator. M2 lives in a busy compound with a lot of young people including several of her grandchildren. If these young people heard about a young girl who was pregnant, they told M2 who called the young woman to see her, and to explain the

scheme to her; if she was interested in the project she would arrange for her to meet the co-ordinator. She had also recruited one girl when she saw her selling in the market. M3 lives in a community up a steep hill and was known for her compassionate involvement with young girls locally; she had been mentoring girls for some time and pregnant girls often sought her out as a confidential advisor.

The main criterion for recruitment to the programme is that the girl was under 18 years of age or under 20 if the girl was disabled. The policy of the girls being interviewed by the co-ordinator before recruitment proved a very effective strategy; despite the age restriction, two girls interviewed by the co-ordinator were over 18 and not invited into the scheme.

Disability and orphan status

Initially, no girls with a disability had been selected as the mentors said they had not heard of any pregnant girls in the area who were disabled. When this was discussed further and a range of disabilities explored, they were able to identify two deaf girls; their perception of disability appeared to be limited to a noticeable physical impairment.

Of the two girls who were deaf, one was profoundly deaf and non-verbal. She was personally known to M3, who was able to communicate simply with her. Another mentor reported that a pregnant teenager in her neighbourhood was deaf, but felt she could not mentor her due to there being no means of communication. As a result of this, deaf awareness training was added to the training package for mentors, as deafness appears to be a fairly common disability in Freetown.

Case study Jeneba (not her real name)

Jeneba is 15. She has been profoundly deaf since birth and has no speech. She lives with her aunt and has never been to school. She helps out at home by doing the family's laundry and fetching water. She was recruited to the mentoring scheme when mentor Ruth noticed that she was pregnant. No-one in the family knew how Jeneba had become pregnant, and she had become withdrawn since the news had emerged. Ruth had known Jeneba since childhood and used basic signing to befriend her further. She took her to the local clinic where she received the basic package of antenatal care. When Jeneba attended her first monthly gathering of mentees and mentors at LNP, she preferred to stay close to her mentor and help to cook rather than to mix with the other girls, who largely ignored her. However with Ruth's persistence and by fostering a group identity with her other mentees, by the second monthly gathering she presented very differently. She smiled and was visibly more relaxed as the girls in her mentor's group made a space for her where they were sitting, proudly showing the others how they were able to communicate with a deaf girl. By the third monthly meeting, Jeneba had left Ruth's side and was part of the group of girls holding the new babies. She had been given the small business start-up and was selling wood outside her house, and like the other girls was able to eat well and buy items for her baby.

The second deaf girl was recruited after this additional training and the mentors said they felt more confident to communicate with deaf girls. Further work is ongoing into local resources for deaf people and local means of education and signing, which appears to be non-standard, but differing from family to family.

Orphan status

Of the girls mentored, 37% had at least one parent who had died, and for 10%, both parents had died. However, 90% of the girls were living with wider family when they became pregnant rather than their biological parents, either due to being orphans or because they had been sent from a rural province to Freetown to live with a relative to provide domestic help or to access education. This was shown to be a risk factor for pregnancy in the 2015 study.

High levels of poverty

The majority of girls (90%) were told to leave the home where they were staying when they revealed their pregnancy, and mentors felt that even when girls initially came from a home with some financial security, they were still very vulnerable due to being told to leave. Most girls had to rely on friends' parents or their boyfriends' families to house them and feed them. For many girls this meant sleeping on a hard floor with no mattress or bed net and being given a meal once a day in exchange for selling goods in the market or doing heavy domestic work such as carrying water or laundering. As examples of girls being recruited with high levels of vulnerability, one girl was sleeping at night in a vacant market stall but had to leave at dawn and not return until dusk; one girl had lost both parents in the mud slide of August 2017; and one girl whose mother and stepfather were both blind and relied on begging had never been to school.

Mentoring support; is it acceptable?

'Being driven' and reconciliation

Although having a mentor was not a magic bullet for family reconciliation, mentors tried to meet all the girls' families as a gesture of respect and to try to build a relationship which might then allow the girl to re-enter the family home after the birth. Many girls explained that they were sent to live with the baby's father's family, but that anger on the part of the boyfriend's mothers was directed towards the girls. For several girls, the persistent gentle intervention of the mentors throughout the pregnancy meant that the girls were allowed home after the birth.

Monthly gatherings and peer support

Once a month, all the mentors, the co-ordinator and all the girls gathered to cook and eat together, and to discuss health topics. This proved to be an extremely popular aspect of the programme. When asked what they liked most about being

mentored, most girls identified this monthly gathering, with eating and having fun together and playing with each other's babies as the main factors.

The peer support which happened spontaneously between the girls was a significant benefit of the programme. Most girls had been at school when they became pregnant and due to the ban on visibly pregnant girls attending school or sitting exams, had to leave [10]. Education is highly valued in Sierra Leone, and the impact of this expulsion from school was keenly felt by the girls. Many not only felt abandoned by their families, but also alienated from their friends. In the first few months of the programme, friendships developed between the girls, and as their babies started to be born, they were clearly enjoying this new common experience. There were several examples of where girls had given each other sound health advice as they shared what the mentors had taught them with each other.

Accessible health education

Prior to starting the pilot, the authors came a cross pictorial health education resources which had been developed and tested locally by the Welbodi Partnership, who agreed to share them with LNP. These laminated picture cards portray common health issues and are

designed to be used in a facilitated discussion with community members. They were used in this way as part of the monthly gatherings and then again 1:1 between mentors and mentees to reinforce the message.

Improving confidence and self-efficacy

Interviews with the girls at the start of the pilot, at 6 months and at 12 months showed clear personal development in areas difficult to measure quantitatively. Despite some of the challenges already discussed, most had run a successful business for the first time, had eaten well every day, had saved for their babies' needs. Having been part of the health discussions for 6 to 12 months, all the girls were confident in their understanding of basic health advice, such as the need to breastfeed exclusively for 6 months, and what to do if their baby had a fever or diarrhoea. As new girls were recruited to the scheme at 6 months into the scheme, 3 of the first recruits were invited to facilitate health discussions using the cards and were very able communicators. The sense of solidarity and friendship amongst the girls was strong, with a significant benefit being the increase in social capital engendered by these relationships; an unexpected positive outcome of the scheme. This benefit was equally true for the mentors who expressed high levels of satisfaction in the role and in the friendships developed by being part of the programme.

Preventing second pregnancies

International research has shown that, though a single pregnancy in teenage years puts girls and their babies at a disadvantage socially and economically, having a second teenage pregnancy hugely compounds these disadvantages [11, 12]. There is no reason to believe this is not the case in Sierra Leone, and the mentoring scheme affords the opportunity to raise aspirations and reinforce the importance of contraception after birth. Ingrained beliefs about delaying uptake of contraception whilst a woman is still breastfeeding are strong, both amongst girls and their mentors, but have been persistently challenged through the piloting year, and attitudes are changing.

Mentors' experience

The three mentors were all in their fifties and were grandmothers. They were chosen because of their reputations for kindness and care for others. They were given a small

monthly stipend. One mentor, a local pastor's wife, had been caring independently for teenage mothers for several years, ensuring they were attending clinic, often accompanying them for birth and supporting them with a small business. Her model of care helped significantly to shape the programme. She clearly enjoyed her work and gained a sense of meaning and efficacy from it. The other two mentors were new to the role. Interviews were undertaken at 6 and 12 months. All three mentors were positive about their experiences; they highly valued the support of the co-ordinator, and all expressed joy and pride in seeing the girls growing in confidence, and babies being born safely and growing well. They expressed a common feeling of frustration with some of the girls' behaviours but acknowledged that this is expected with the age and circumstances of the girls. They too valued the friendships and peer supports that developed over the year.

The health messages were very effective not just for the young women being mentored, but for the community more generally, as these respected women shared them more widely. For example, one mentor said she now told all pregnant women how carrying very heavy water containers could lead to bleeding and miscarriage, and another said she now understood that the common advice for pregnant women to restrict their food intake to ensure their baby was small and easy to deliver was wrong and she was encouraging all pregnant women to eat well. This is an encouraging finding as it indicates a wider impact for the community than just the mentees of the scheme.

Supporting small businesses

It was recognised that an important factor in determining birth outcomes in this group is their lack of economic capital. This resulted in most girls not eating adequate quantity or quality of food and having no means to purchase medicines prescribed in pregnancy, or items for their births or babies. Having a small start-up fund to enable them to engage in petty trading was identified as a key element of the scheme. This was the most challenging part of the scheme to get right, with several versions being tested over the year. With iterative feedback from the mentors, the final regime is robust and sustainable.

The role of the mentor as business advisor

The role of mentors in relation to these small businesses is to help the teens identify a suitable business that will be sustainable and profitable; a period of 2-3 weeks is taken for the mentor to get to know the girl and to help her decide what to sell. Some girls had experience of selling a particular item for an aunty; others had no previous experience. When this was decided, the girl went with her mentor to buy her first items to avoid the problem which arose of friends or family members taking the money before the girl had chance to buy her items. Mentors also help with issues such changing what the girl sells depending on demand (for example if a girl sells lunch to school children, the mentor helps

her to flex during school holidays), as well as managing seasonal differences in supply and demand. During the rainy season it is difficult for traders to do well because people's movements are restricted, and since the girls are not selling in shops, but move around carrying their items, this issue is compounded..

Effectiveness and sustainability

The small business aspect of the project has been very successful. Though the girls differ in their business skills, all of them reported making enough money to eat well every day and buy items for their babies. A proportion of the initial fund is repaid; a daily repayment system of Le 2000 per day paid via the mentors and collected weekly by the co-ordinator has proved a sustainable model after much testing. In addition to repaying the initial amount, some girls also saved significant amounts of money. Challenges to the scheme are that the girl can be called upon to support other family members, even when they have been thrown out of home. One girl who had saved a significant amount of money gave half of what she had saved to her mother to pay for a hospital bill; medical care is only free for pregnant women and under 5's, so a sudden sickness can be disastrous for a family's economic security.

Financing futures

The girls are given two instalments of a start-up grant; once in pregnancy and once when she is ready to start doing business after birth. Once the initial amount is repaid, she is also given a smaller amount as a reward for repayments, and is able to save this and all future profits for her next steps. Several of the girls had plans to run their businesses for the rest of the school year, saving for school expenses such as uniforms, books, bags and shoes, in order to return to school the following September. Indeed, the girl with the oldest baby has returned to school this September, and with her new business skills, is selling phone credit at school to pupils and teachers, which is supporting her living costs. Others have plans to save for vocational training (although this incurs a much higher cost), and others who were doing well with their businesses had plans to develop them. For all the girls this aspect of the scheme provided not only financial provision, but an opportunity to learn new skills and grow in responsibility and self-efficacy.

Data collection

Assumptions of literacy

The initial assumption within the pilot was that mentors would complete basic data collection forms for their mentees. It became clear very early on that this assumed a level of literacy was unrealistic; the women selected had a range of literacy levels but did not read or write in everyday life. It was decided that data collection would fall under the remit of the co-ordinator.

Need for data vs excessive paper work / An iterative process

The first version of the data collection form required monthly input from the co-ordinator, recording any antenatal visits, episodes of sickness, any interaction between the mentor and the girl's family and an update on the girl's small business. It became apparent however that this task was burdensome for the co-ordinator and there was an opportunity cost in that the majority of the time spent with the mentor and mentee was taken up with paperwork and not with more helpful discussion and problem-solving. Two revised editions of the data collection form were tested, with the final version having pared the process down to collecting data on four occasions only; at first contact when the mentee was registered to the scheme, after birth, at six months post-birth and at twelve months post-birth. This collaborative process has ensured that sufficient data is collected to allow for qualitative outcomes to be reported, but with minimal opportunity cost.

Next steps

2 Young Lives is a robustly piloted intervention which not only saves the lives of teenagers and infants but provides vulnerable teenagers with an opportunity to develop confidence and self-efficacy, and to move on with their lives; encouraging girls to consider their options for education and training, as well as discouraging a second pregnancy. It also benefits the community more generally as simple and effective health messages are widely dispersed.

The pilot year has allowed flexibility in programme development. Using an iterative process of co-production with local teenagers and mentors, the learning gained in this pilot stage has been embedded into the programme.

The programme is currently being manualised, including the thorough training scheme which has been developed for mentors and co-ordinators. Training, supervision and monitoring processes are clearly described in order to ensure fidelity to the programme as it is scaled up.

The scheme is now ready for scale-up, and Lifeline Nehemiah Project is actively seeking out opportunities for partnership with other community organisations.

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Expressions of interest

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