

AT2030
Innovation Insights

MiracleFeet: the human impact of foot braces in Nigeria and Liberia

**Cluster 2
Innovation**
The Assistive Technology
Impact Fund

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Nigeria and Liberia

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IMPACT FUND**

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Highlights

- 200 parents and guardians of children receiving MiracleFeet treatment in Nigeria and Liberia were surveyed using the Assistive Technology Impact Measurement survey.
- 98% of children who used the MiracleFeet brace experience improved quality of life. Parents and guardians of children using the brace attributed the improvement to their child's ability to move, stand, play, and forge positive relationships.
- Parents and guardians of children undergoing Miracle Feet brace treatment are highly satisfied and loyal towards the company, with a Net Promoter Score[®] of 88.

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Abstract Heading

The Assistive Technology Impact Fund has committed investment to support the company MiracleFeet, who provide clubfoot treatment to children in LMICs. To validate the impact that MiracleFeet is having on children, ATIF commissioned 60 Decibels to conduct research using a suite of codeveloped survey modules specifically tailored to the impact of assistive technology. In this report, data and insights are shared from 200 parents and guardians of Nigerian and Liberian children who have undergone treatment using the MiracleFeet brace. The evidence shows that the MiracleFeet brace overwhelmingly has a positive impact on children's quality of life, with improvements to children's ability to move, stand, play, and forge positive relationships.

Introduction

MiracleFeet is on a mission to eliminate life-long impairments caused by clubfoot in Lower-Middle Income Countries (LMICs). Clubfoot affects one in every 800 births around the world ¹, with 90% of the 180,000 new cases each year found in LMICs [1]. Untreated, clubfoot can cause physical impairments, limit participation in everyday life, and lead to social exclusion. MiracleFeet provides organisational, technical, and financial support to clinics and practitioners trained in the Ponseti Method, a non-surgical treatment for clubfoot that involves a series of plaster casts and Foot Abduction Braces (FAB's). The method has a 95% success rate and MiracleFeet have supported over 650 providers in 28 countries. Currently, MiracleFeet's FAB, the MiracleFeet Brace, is provided for free.

As a portfolio venture of the [Assistive Tech Impact Fund \(ATIF\)](#) ², ATIF is supporting MiracleFeet to diversify distribution and to explore the brace as a revenue stream via a social enterprise model. The social enterprise model is being initially piloted in Nigeria and, if successful, may be rolled out across other locations to ensure financial sustainability of MiracleFeet. To validate the effectiveness of the MiracleFeet technology, ATIF also commissioned research in partnership with impact measurement specialist firm 60 Decibels. In this report we share our research which rigorously explores how the MiracleFeet brace changes the lives of the children who receive MiracleFeet treatment and to what degree.

¹ Based on systematic meta-analysis, the Global Clubfoot Initiative uses a global incidence rate of 1.23 per 1,000 live births.

² More information on the AT Impact Fund can be found at <https://atimpactfund.com/>

Approach

To understand the impact of the MiracleFeet brace, parents and guardians of children who use the MiracleFeet brace were surveyed using the AT Impact assessment survey. The AT Impact assessment survey has been co-created by GDI Hub and 60 Decibels and include 11 modules which capture impact relating to a wide range of topics ranging from access and affordability of AT, to the effect of AT towards social ties and relationships. Not all questions or modules were used here because not all were relevant to young children. Additionally, some questions were lightly modified so they could be asked and answered by the parents and guardians of the children undergoing treatment. Although MiracleFeet works in 28 countries, in this report the products impact has been explored in Nigeria and Liberia to provide a west-African perspective.

Respondents Surveyed By Country

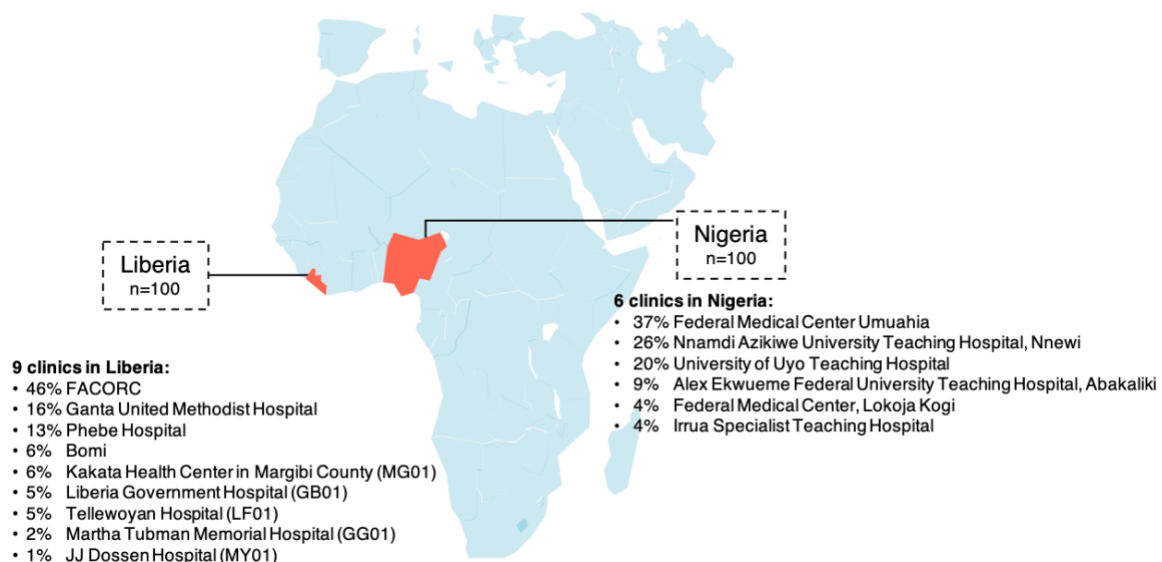


Figure 1. Respondents were found through clinic contacts in Liberia and Nigeria

To undertake the survey, 60 Decibels worked with their network of enumerators, those that can collect survey data, to conduct telephone interviews with guardians whose children are already using a MiracleFeet brace and part of their treatment through a MiracleFeet partner clinic. To reduce bias the enumerators ensured parents understood that they were working independently to MiracleFeet and that their responses were confidential. Respondents were selected at random from a database of 631 contacts, resulting in responses from 200 people (100 in Nigeria, 100 in Liberia).

60 Decibels independently analyzed the data and shared a summary of insights with GDI Hub and MiracleFeet. For free-response survey results, an open coding approach was used. As part of their analysis, 60 Decibels also shared impact insights relative to the 400+ companies which they have conducted impact analysis on, even though their industry and topic may have been different. This report was written and edited by authors at GDI Hub, using the insights provided by 60 Decibels.

Impact highlights

Overall, the casting treatment combined with the MiracleFeet brace demonstrates impressive levels of improvement in terms of patients’ mobility and quality of life.

Parents and guardians of children receiving MiracleFeet treatment also

communicated high levels of satisfaction with the treatment.

| | | | |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <p>Using brace as prescribed</p> <p>85%</p> <p>‘Yes always’ able to follow prescription</p> | <p>Clubfoot correction</p> <p>84%</p> <p>Brace ‘very helpful’ in correction</p> | <p>Impact</p> <p>80%</p> <p>Quality of life ‘very much improved’</p> | <p>Ability to walk</p> <p>77%</p> <p>‘Very much improved’ ability to walk</p> |
| <p>Inclusivity</p> <p>0.91</p> <p>Live in poverty</p> | <p>Net Promoter Score [®]</p> <p>88</p> <p>On a -100 to 100 scale</p> | <p>Continuing usage</p> <p>57%</p> <p>‘Very easy’ to keep brace on child</p> | <p>Challenges</p> <p>27%</p> <p>Report challenges with brace</p> |

Figure 2. Standout impact highlights

Key aspects of impact

Overall, the impact of the brace is extremely positive, with robust evidence of improvements to children’s social inclusion, mobility, and quality of life. The brace has improved quality of life for nearly all (98%) of the children using the brace. They attribute the child’s ability to stand with a straightened foot and their ability to play to this improvement. 77% of guardians in both countries report that their child’s ability to walk has ‘very much improved’, and over 80% say that the brace has been ‘very helpful’ in maintaining the straightness of the child’s foot. Finally, nearly 2 in 3

guardians in Liberia, and 90% in Nigeria report improvements in their child's ability to get along with others.

As a venture driven to ensure equitable access to clubfoot treatment, MiracleFeet's brace is also successfully reaching low-income households. MiracleFeet has a high inclusivity ratio of 0.95 in Liberia and similarly impressive score of 0.85 in Nigeria. This indicates that MiracleFeet's customers are proportionately representative of the country's population in terms of income and national averages. Additionally, half of the parents and guardians surveyed said they would not be able to pay for the brace if it wasn't free, indicating that MiracleFeet is making the brace accessible to many who wouldn't otherwise be able to afford it.

When considering usage of the brace, children are able to use it as prescribed and report high adherence to treatment. Over 4 in 5 guardians in both countries say they are always able to use the brace as prescribed, with 4 in 5 also describing the brace as easy to keep on their child. This indicates that the brace is easy-to-use for most.

When 60 Decibels compared the MiracleFeet data to their database of over 400 organisations in other industries, MiracleFeet is in the top 20% in terms of positive change to quality of life. When looking at Net Promoter Score, a value which indicates the loyalty of customers to MiracleFeet, the company is also in the top 20%.

Respondent profile

To understand who MiracleFeet are serving, demographic information was collected both for the child receiving treatment, and the parent or guardian who was responding to the survey.

Demographics

Most respondents to the survey were mothers of the child receiving treatment. On average, Nigerian respondents tended to have completed a higher level of education than their Liberian peers. When we consider household size, Liberians lived in larger households compared to their Nigerian peers, with typical households in Liberia consisting of 8 people, vs 5 in Nigeria.

About the MiracleFeet guardians we spoke with

Data relating to guardian characteristics (Liberia = 100, Nigeria = 100)

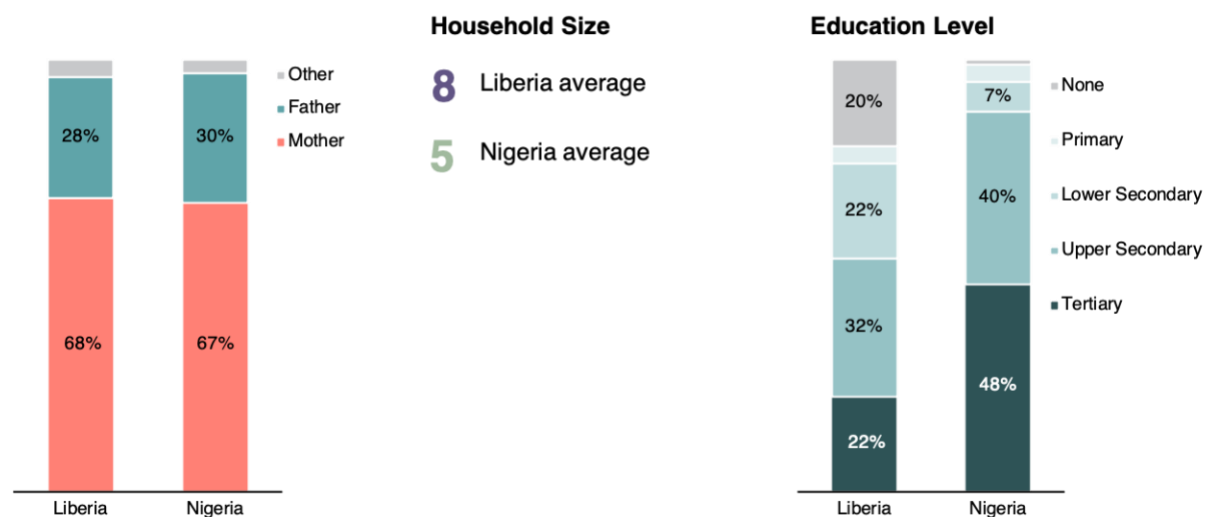


Figure 3. The respondents were mostly mothers of the children receiving treatment. Reasonable levels of education were evident in both Liberian and Nigerian parents and guardians.

When reviewing the demographics of the children receiving MiracleFeet treatment, roughly 3 in 5 patients are male and are on average 2 years old. MiracleFeet may be reaching more male than female patients, however, research shows [2] that clubfoot is more common among male children, so this is to be expected. When considering age, close to 60% of the children were between 1-2 years old at the point of survey.

About the MiracleFeet patients we spoke with

Data relating to patient characteristics (Liberia = 100, Nigeria = 100)

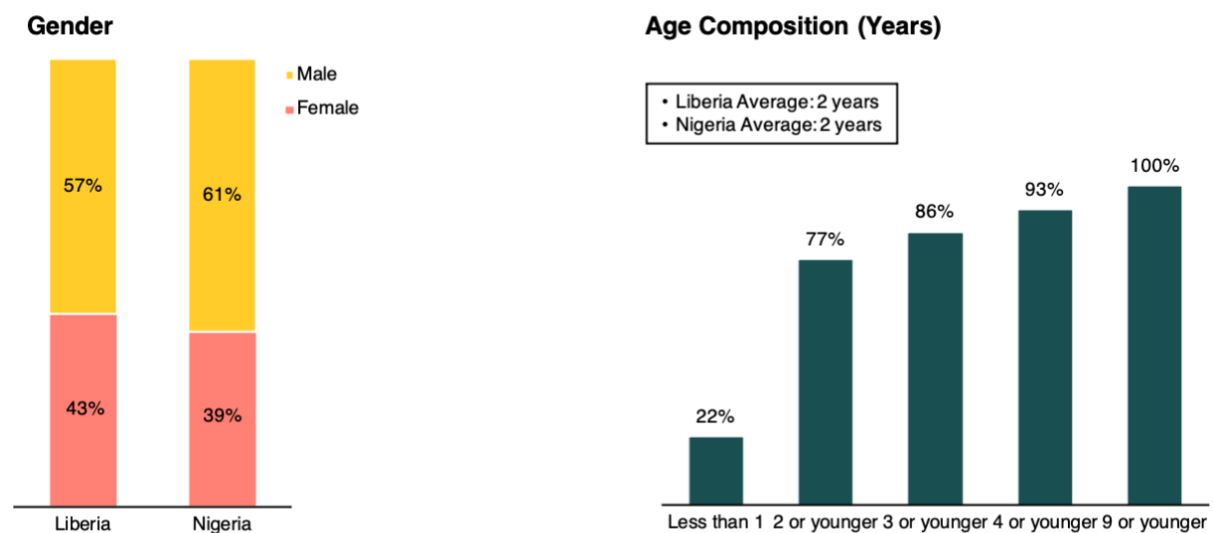


Figure 4. More boys are receiving treatment, but that is due to higher prevalence in males. On average, children receiving treatment were 2 years old.

Financial inclusivity

Using the Poverty Probability Index® [3] the income profile of respondents was compared to country averages. At the recommended \$1.90 line for Liberia, MiracleFeet is serving households similar to the national average.

Income Distribution of MiracleFeet Relative to Liberian National Averages

% living below \$xx per person / per day (2011 PPP) (n = 98)

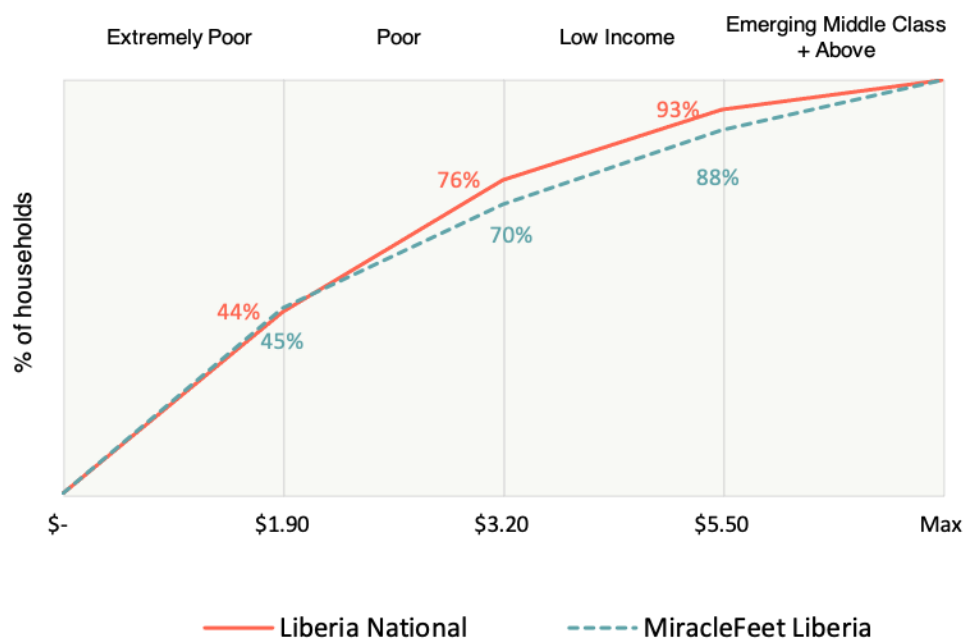


Figure 5. In Liberia, MiracleFeet are serving most people well regardless of income.

In Nigeria, MiracleFeet are serving marginally wealthier households than the Nigerian national averages at the World Bank recommended \$3.20 line.

Income Distribution of MiracleFeet Relative to Nigerian National Averages

% living below \$xx per person / per day (2011 PPP) (n = 100)

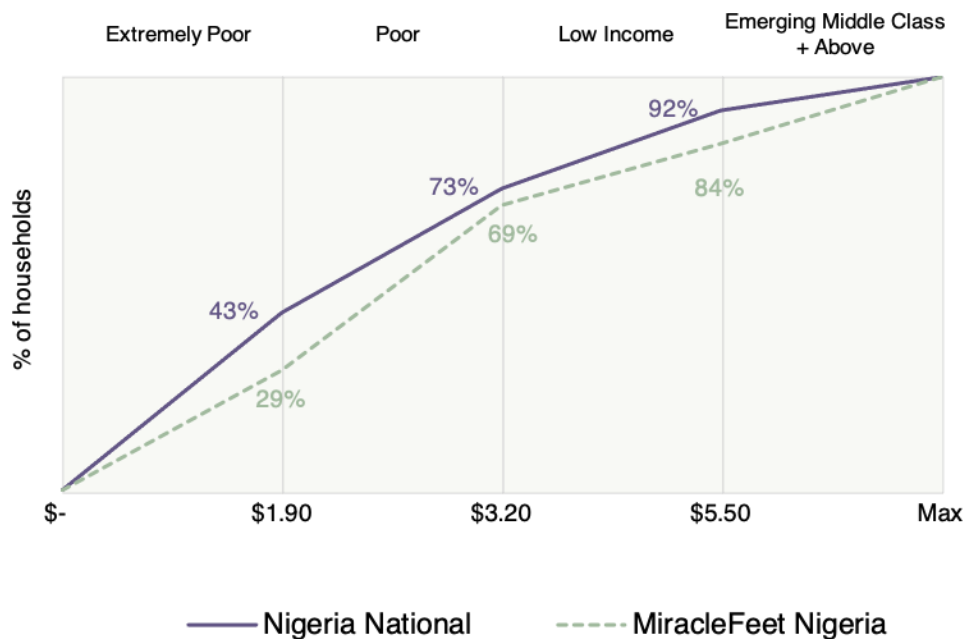


Figure 6. In Nigeria, MiracleFeet are also serving most people well regardless of income, but are slightly underserving the extremely poor.

To provide a representative metric to understand how financially inclusive a company is, 60 Decibels calculated the inclusivity ratios for country. The inclusivity ratio is a metric developed by 60 Decibels which takes the average between the % of households which a company serves at the \$1.90, \$3.20 and \$5.50, and divides that value by the percentage of households in a country at the same income level (see appendix).



Inclusivity Ratio

Degree that MiracleFeet is reaching low-income guardians in Liberia and Nigeria.

Liberia

Nigeria

0.96

0.85

● ● ● ● ● - TOP 40%

● ● ● ● ● - TOP 40%

We calculate the degree to which you are serving low-income customers compared to the general population. 1 = parity with national population ; > 1 = over-serving; < 1 = under-serving.
See Appendix for calculation.

Figure 7. Inclusivity ratios for Liberia and Nigeria

Therefore, in Liberia, MiracleFeet is doing an excellent job at providing clubfoot treatment to children from extremely poor, poor and low-income households. In Nigeria, MiracleFeet is overall providing clubfoot treatment to children from low-income households in Nigeria, though some work could be done to serve the extremely poor.

Treatment duration

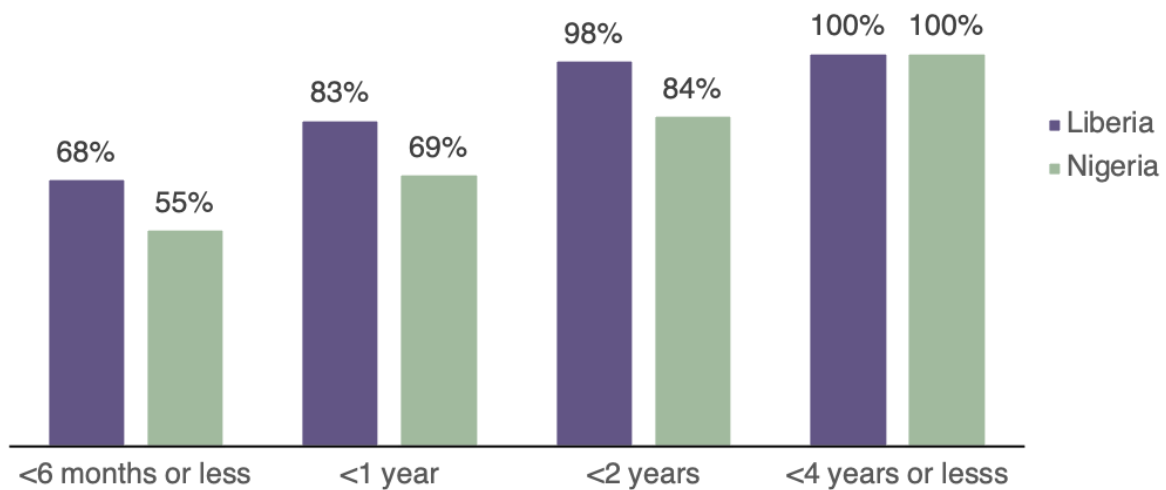
To understand the length of time that the braces have been used for at the time of survey, we asked parents and guardians how long ago their child started using the brace. The self-reported time with the brace is shown in figure 8. Given that bracing is a treatment that typically requires a 4 year intervention, the average child in Liberia and Nigeria are still some way off completing their treatment. Effectively none of the

people contacted have completed 4 years of bracing. However, because these MiracleFeet programs in Nigeria and Liberia are relatively new, this is unsurprising.

Time Since First Brace Usage

Q: Approximately how many months ago did your child first start using the purple brace? (Liberia = 87*, Nigeria = 100)

- Liberia Average: **10.2 months**
- Nigeria Average: **6.5 months**



*13 guardians in Liberia were unable to recall when they started using the brace.

Figure 8. Duration of brace usage at time of survey

Acquisition and use of the brace

Understanding how people come to access the brace is important, as it provides an insight into which channels are most effective to reach children in need of treatment.

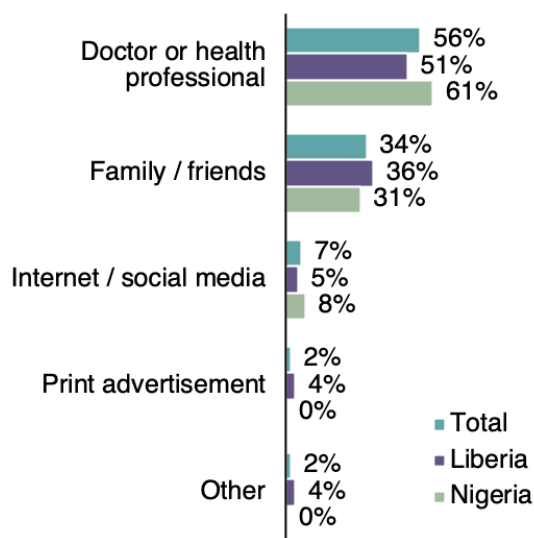
The majority of the parents and guardians heard about the brace from a doctor or health professional. A third of guardians heard about the brace from their friends and

family, and a tenth from internet or social media. A higher proportion of fathers (42%) said they heard about it from family or friends, compared to mothers (30%).

When asked about where they received the brace, all guardians in both countries said hospital or clinic. A small proportion of guardians also report having used a different brace prior to the MiracleFeet brace, and anecdotally a few reported switching to MiracleFeet’s treatment program as it was free of cost.

First Source of Information

Q: How did you first hear about where to get clubfoot treatment? (n = 200, Liberia = 100, Nigeria = 100)



Prior Access to a Brace

Q: Before you started using this brace, were you using another brace? (Liberia = 96, Nigeria = 93)

95%

In Liberia did not use a brace prior to MiracleFeet

93%

In Nigeria did not use a brace prior to MiracleFeet

Figure 9. Most MiracleFeet customers found out about the brace from health professionals. Only a few used a brace before the MiracleFeet solution.

To understand the competitive landscape, respondents were also asked how easy they thought it would be to find a suitable alternative product to the MiracleFeet brace. The fact that 86% said they could not easily find a good alternative suggests that the MiracleFeet brace is a unique offering. Guardians in Liberia are more likely than those in Nigeria to report finding alternatives. However, these alternatives were

described as regular shoes or boots. When paired with the insight that nearly all respondents are using a brace for the first time, MiracleFeet are clearly providing a needed intervention which would otherwise be unavailable to most people in these countries.

Access to Alternatives

Q: Could you easily find a good alternative to the brace you are currently using? (n = 200, Liberia = 100, Nigeria = 100)

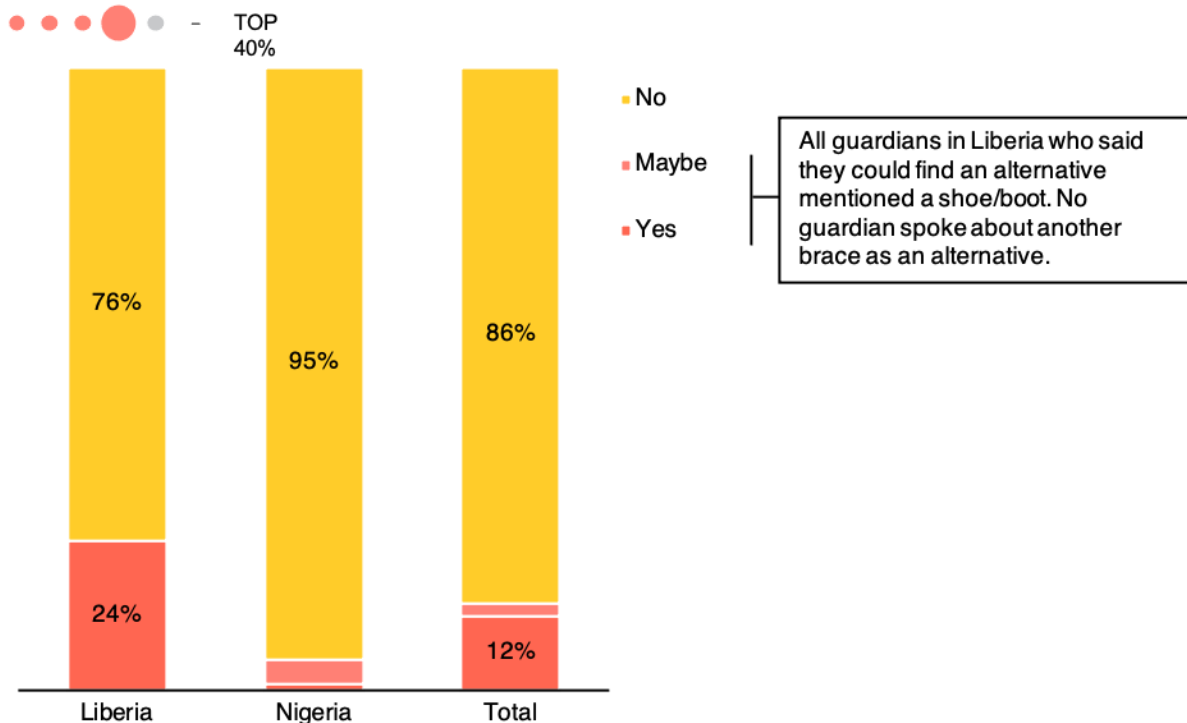


Figure 10. The majority of respondents would not be able to find an alternative brace if they did not have access to the MiracleFeet brace.

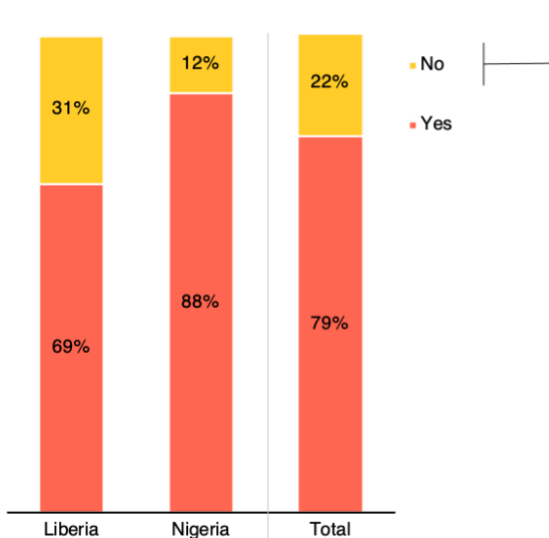
Usage of the brace

One of the most pertinent challenges with preventative/ interventional assistive technologies such as foot braces, is that for them to have the desired effect, they must be used regularly for a sustained period of time. Therefore, it was important to understand if parents and guardians intend to continue their child’s brace usage. 1 in

5 guardians say that the child will not continue to wear the brace. However, when investigating reasons why, sizing issues of the brace was mentioned, or that the condition has been corrected. There are differences by country in why the child would no longer wear the brace. In Liberia, sizing issues are the top cited reason (20 of 100 respondents). In Nigeria, guardians perceive that the clubfoot condition has been corrected (9 of 100 respondents). Although it is reassuring to hear that parents have seen changes which makes them believe the condition is corrected, follow up parental education is likely needed to ensure that the brace is worn for the full duration of the treatment.

Continuity in brace usage

Q: Will your child continue to wear the brace? (n =200, Liberia = 100, Nigeria = 100)



Reasons to discontinue brace

Q: Why will your child not continue wearing the brace? Open ended, coded by 60 Decibels. (Liberia = 31, Nigeria = 12)

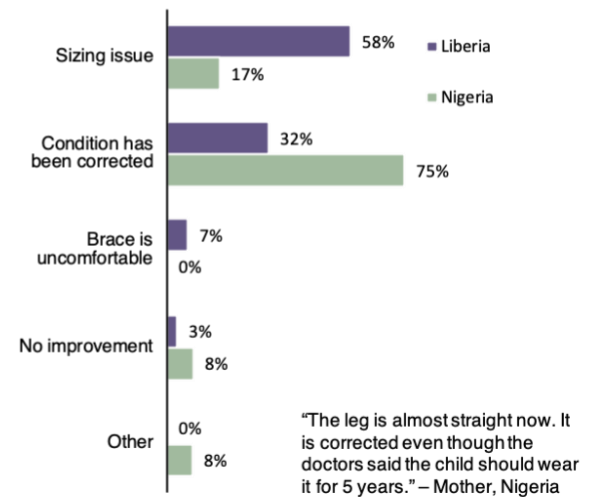


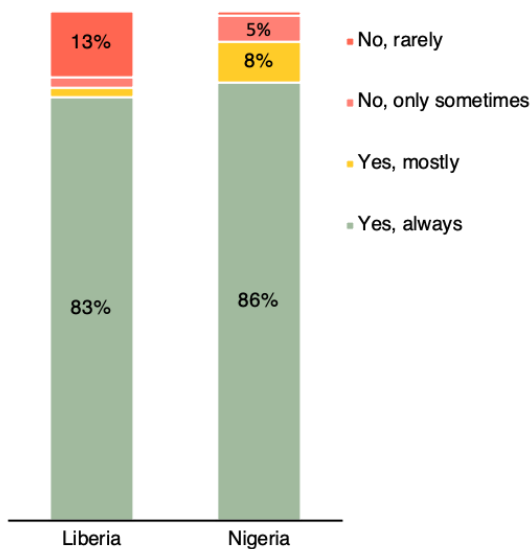
Figure 11. Brace usage continuity data shows that most people will ensure their child continues to wear the brace. Reasons for brace discontinuation are shown to due to sizing issues, or the positive reason the condition has been corrected.

Over 4 in 5 guardians in both countries said they were always able to use the brace as prescribed by the doctor. Of the few respondent who said they are not able to always use the brace as prescribed, reasons varied by country. These results are

shown in figure 12. The patients whose brace is too small, on average, are 3 years old and started their treatment 1 year ago.

Ability to Follow Prescription

Q: Are you able to use the brace whenever you need to (as your doctor prescribed)? (Liberia = 100, Nigeria = 100)



Inability to Use Brace

Q: Could you explain why you are not able to use the brace every time you need to (as your doctor prescribed)? Open ended, coded by 60 Decibels. (Liberia = 17, Nigeria = 14)

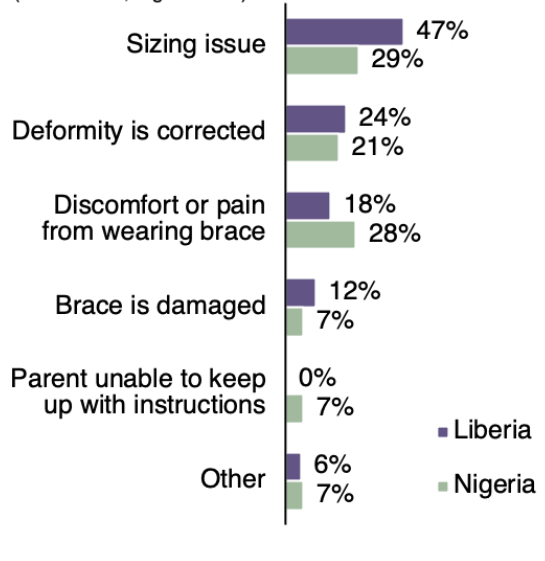


Figure 12. Ability to follow prescription and reasons why, broken down by country

Impact deep dive

As with any assistive technology, impact is multidimensional. That is why we investigated outcomes in terms of mobility, perceived quality of life and social inclusion to understand exactly how MiracleFeet is improving the lives of children using the brace. In this section, insights relevant to these areas are showcased.

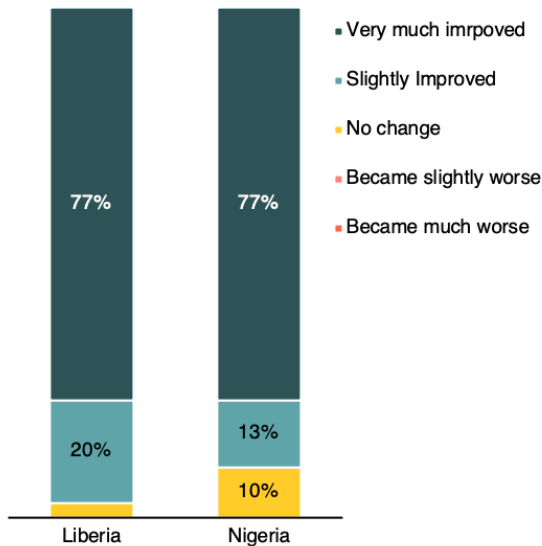
Mobility Impact

As a product which aims to prevent lifelong issues with mobility, understanding the improvement to mobility for children is important. After reviewing the data, almost all guardians in both countries say their child's ability to move and walk has improved because of the brace. When investigating respondents who reported no change in Nigeria, the median age of the child being treated was 8 months. This is much lower than the median age of 2 years or more of those whose ability to walk has improved in conjunction with typical developmental milestones. Therefore, these younger children may go on to have improvements in their walking and mobility.

When investigating the perceived correction of the limb difference, parents and guardians generally find the brace to be very helpful in managing the deformity, with no major differences between Nigeria and Liberia. Overall, only 5% of respondents in Liberia and 2% in Nigeria thought that the brace was either not very helpful, or not helpful at all. Whilst the goal will always be to have 100% correction, these values demonstrate extremely high levels of correction and therefore will likely reduce mobility issues long term for the children undergoing MiracleFeet treatment.

Ability to Walk

Q: Has your child's ability to walk changed because of the clubfoot treatment and brace? (Liberia = 99, Nigeria = 100)



Correction of Foot Condition

Q: To what extent has the brace helped in maintaining the correction of the deformity? (Liberia = 100, Nigeria = 98)

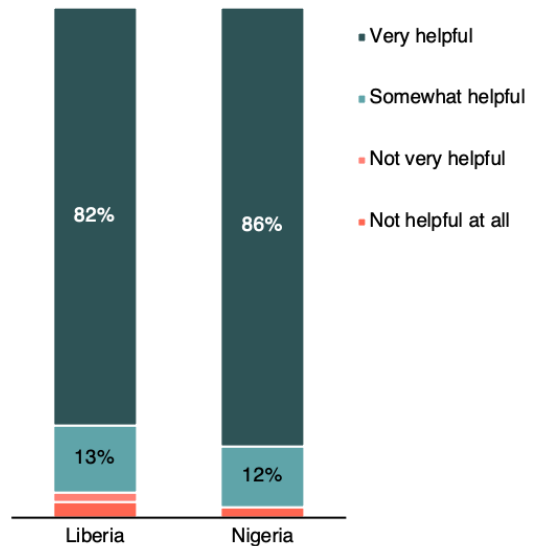


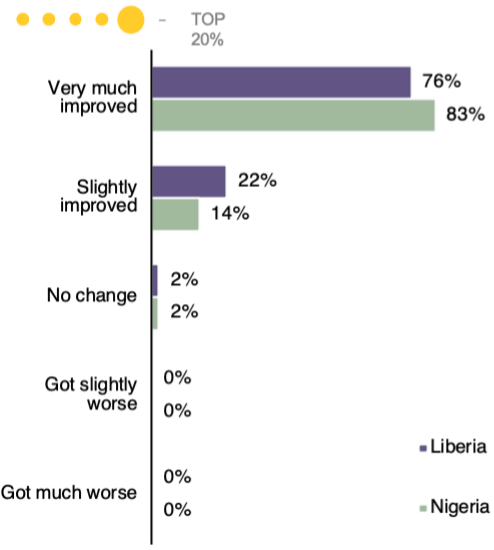
Figure 13. The ability of patients to walk post-use of the MiracleFeet brace and the number of patients with corrected foot conditions are shown.

Quality of Life

To gauge depth of impact, guardians were asked to reflect on whether their child's quality of life has changed because of MiracleFeet. 83% of Nigerian and 76% of Liberian parents and guardians mentioned that their child's quality of life had very much improved after using the brace. When grouping responses together which demonstrate some degree of improvement in quality of life, 97% of guardians report quality of life improvement in Liberia, and 98% in Nigeria

Perceived Quality of Life Change

Q: Has your child's quality of life changed because of the clubfoot treatment he or she received? (n = 100, Liberia = 100, Nigeria = 100)



Very much improved:

“My baby now has more confidence in himself than before. He is walking very well. If you didn't know him before and you see my baby now, you will not even know that something was wrong before.” – Mother, Nigeria

Slightly improved:

“He is trying - he can sit down now, he can move his legs and when you hold his hand, he can move his foot by walking.” – Father, Liberia

Figure 14. Perceived quality of life change is shown here.

Guardians were asked to describe – in their own words – the changes they saw their child because of MiracleFeet’s brace. Parents and guardians attribute the positive changes in quality of life with their child’s ability to move and walk, stand, play, and noticeable change in the appearance of their child’s foot to be more ‘typical’ (see figure 15). Additionally, some parents mentioned that their child seems happy or lively (11%), that their child is ‘mingling’ with others, and that they can see improvements in the foot condition (8%).

Top three self-reported outcomes for improved Quality of Life

Q: Please explain how your quality of life has improved. (Liberia = 98, Nigeria = 97). Open-ended, coded by 60 Decibels.



Figure 15. Themed outcomes which determine quality of life improvements are shown.

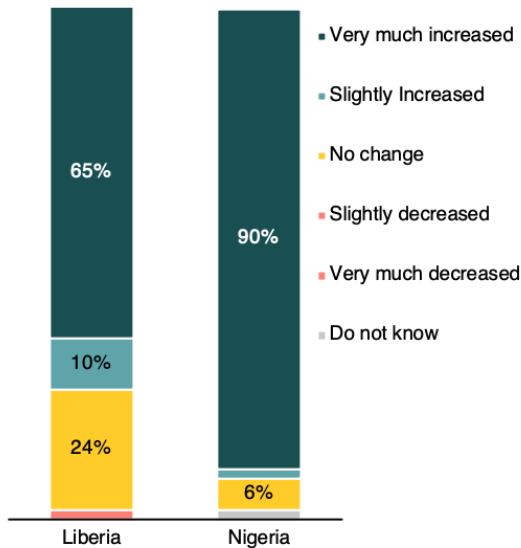
Social inclusion

The ability to participate and feel included in society is an important facet to general wellbeing, and something which is often limited by impairments. For children, the ability to participate socially is especially important as they develop these skills for lifelong use. We asked two questions relating to social inclusion; firstly we asked parents and guardians if they noticed a change in their child’s ability to make friendships, and then if they’ve noticed a change in overall social participation. After using the brace most guardians report highly positive outcomes in the child’s ability to keep friendships and participate in social events. However, Nigerian guardians report higher levels of improvements in their child’s social experiences like getting along with people and participation in gatherings than their Liberian peers.



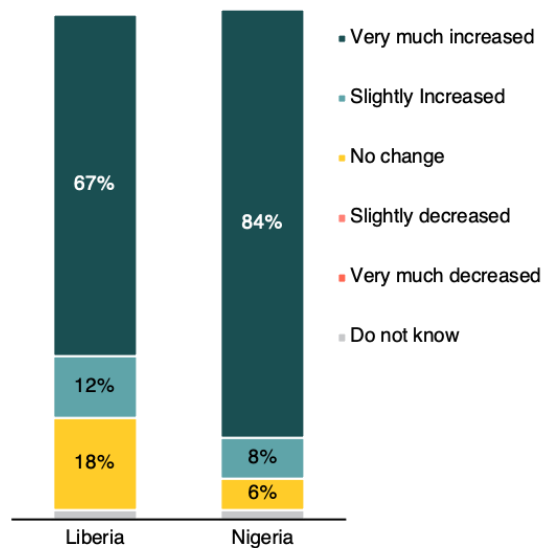
Ability to Make Friendships*

Q: Has your child's ability to get along with other people and making or keeping friendships changed because of the brace? (Liberia = 51, Nigeria = 49)



Social Participation of the Child*

Q: Has your child's ability to participate in social events and gatherings changed because of brace? (Liberia = 51, Nigeria = 49)



*This data has been presented for children who were at least 2 years old at the time of interview.

Figure 16. Change in social inclusion in terms of ability to make friends and social participation.

Qualitative Impact

We also invited parents and guardians to reflect and share with us in their own words their overall impression of how their child's life has improved since using the brace.

“My child now is walking on his 2 legs; he walks normally and also plays around too.” – Father from Nigeria

For many households, after bracing, they now feel that they can leave their child at home due to improvements in their mobility. The MiracleFeet brace therefore can benefit not only the child, but also the household, by freeing up parental time for additional work and leisure activities.

“He can walk by himself now and he refused for us to hold him. We can leave him at home now and he can move around.” – Mother from Liberia

The bracing intervention has also improved the quality of participation and relationships. One mother from Liberia notes that their child is no longer called names which could affect a child’s social participation and self-confidence.

“The quality of her life has improved because she used to be call ‘bend her foot’ but nobody called her names now.” – Mother from Liberia

Additionally, a father in Nigeria also noted that people generally acted more positively toward the child, since their child’s foot looks more similar to their peers.

“It has improved the perception of people towards my child's feet because the feet have been corrected.” – Father from Nigeria

The overall improvements in a child’s ability to walk, made possible by the MiracleFeet brace, have also led to improved social participation with fellow children.

“The acceptance of my child among her mates because she can walk” – Mother from Nigeria

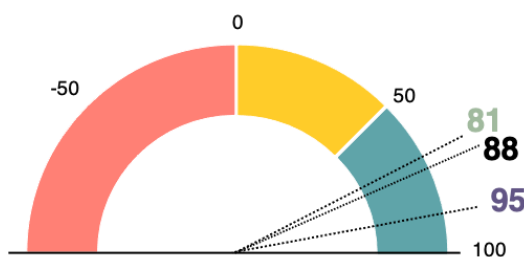
The open-ended responses overall showcased improvements in children’s ability to play, be more independent, participate fully with their peers and forge positive relationships, whilst also not facing disability stigma. The culmination of these effects are highly encouraging.

Net Promoter Score

Whilst not a conventional indicator of a ventures impact, we used the Net Promoter Score[®] to gauge the satisfaction and loyalty shown by parents and guardians towards MiracleFeet. Anything above 50 is considered very good, with a negative score considered poor. Analysing all of the responses, MiracleFeet has an exceptional Net Promoter Score[®] of 88, which indicates high satisfaction and loyalty among parents and guardians. As seen in figure 17, this puts MiracleFeet well into the top 20% of all the 400+ companies which 60 Decibels can benchmark against, and more than double compared to other West African companies, or healthcare companies. Such a high NPS score therefore demonstrates that parents and guardians are highly satisfied with MiracleFeet and the impact the brace is having on their children.

Net Promoter Score[®] (NPS)

Q: On a scale of 0-10, how likely is it that you would recommend the brace you are using to another parent whose child has clubfoot, where 0 is not at all likely and 10 is extremely likely? (n = 198, Liberia = 98, Nigeria = 100)



NPS = % Promoters — % Detractors

9-10 likely to recommend 0-6 likely to recommend

■ Liberia ■ Nigeria

NPS Benchmarks

● ● ● ● ● — TOP 20%

| | |
|---------------------------------------------------------|-----------|
| 60 Decibels Global NPS average 400+ companies | 43 |
| West Africa NPS average 72 companies | 32 |
| Healthcare NPS average 17 companies | 43 |

Figure 17. The NPS scores in Liberia and Nigeria but MiracleFeet in the top 20% of companies which 60 Decibels can benchmark against.

Responses which fell into the ‘promoter’ category (see figure 17) can be attributed to effective clubfoot treatment (70% of Nigerians, and 59% of Liberians), improved ability to walk (32% of Liberians, and 23% of Nigerians), stand (18% of Liberians) and good progress in correcting the impairment caused by clubfoot (24% of Nigerians). For people who provided a ‘passive’ response (those providing a 7 or 8 in response to the NPS question), do not have complaints. The 7% in Liberia talk about the child’s ability to stand, take steps/walk, sit by themselves and crawl since wearing the brace. Nigerians talked about partial reduction of impairment, for example, a child’s inability to walk despite having a straight foot, and the causes for it, for example, the inability to complete treatment due to personal reasons.

Challenges for brace usage

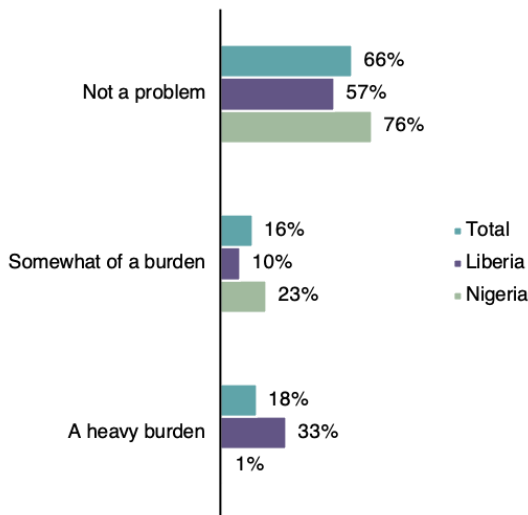
To uncover areas of improvement for MiracleFeet, we also inquired about challenges with accessing and using the brace.

Financial burden of treatment

While MiracleFeet’s clubfoot treatment itself is free for all, guardians may incur some out-of-pocket expenses (transportation to the clinic or clinic admin fees).

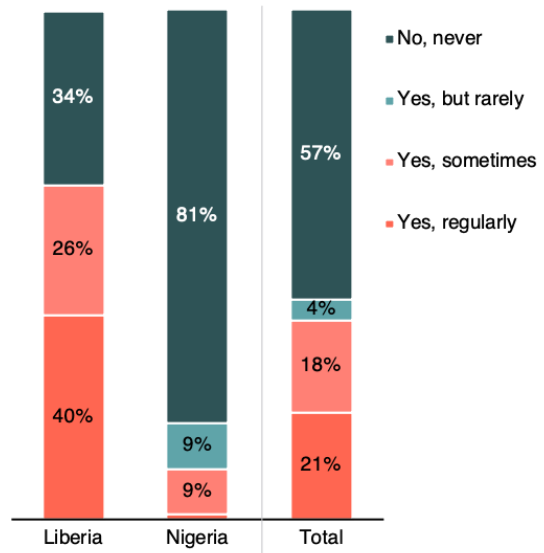
Payment Burden

Q: Thinking about the clubfoot treatment, do you find the cost of this treatment a heavy burden, somewhat of a burden, or not a problem? (n = 182, Liberia = 94, Nigeria = 88)



Food Consumption Changes

Q: Do you have to reduce your households' food consumption to afford clubfoot treatment for your child? (n = 184, Liberia = 94, Nigeria = 90)



*This question was asked to all respondents following pilot observations.

Figure 18. Financial burden and consequences as a result of accessing MiracleFeet treatment

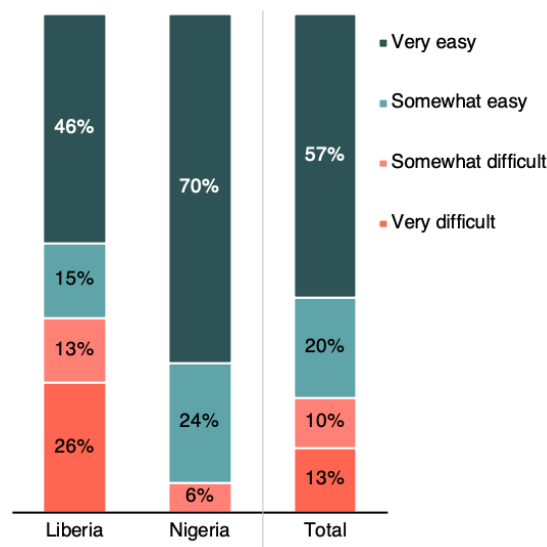
Guardians in both countries who report that the MiracleFeet treatment is somehow burdensome were from poorer households, compared to respective national averages. A third of guardians in Liberia say the costs associated with treatment are a heavy burden and two-thirds said they had to reduce their household’s food consumption sometimes or regularly to afford the clubfoot treatment. Therefore, even though the impact is overwhelmingly positive for the child, households in poverty may struggle to pay for the intangible costs required to access MiracleFeet treatment. This, however, is a reflection of larger societal issues.

Ongoing use

Of the 24% of Liberians who reported challenges with the brace, 58% said that the brace was uncomfortable or painful for the child, 29% highlighted that the brace was difficult to put on, and 21% mentioned that their child cries when wearing it. Of the 30% of Nigerians reporting challenges, 35% mentioned that the child has outgrown the shoes, 35% mentioned discomfort (but not pain), and 17% mentioned that their child cries when wearing the brace.

Ease of Keeping Brace On

Q: How easy or difficult is it to keep the brace on your child every day? (n = 198, Liberia = 99, Nigeria = 99)



Proportion of Guardians Reporting Challenges

Q: Have you experienced any challenges with using the brace? (Liberia = 100, Nigeria = 99)

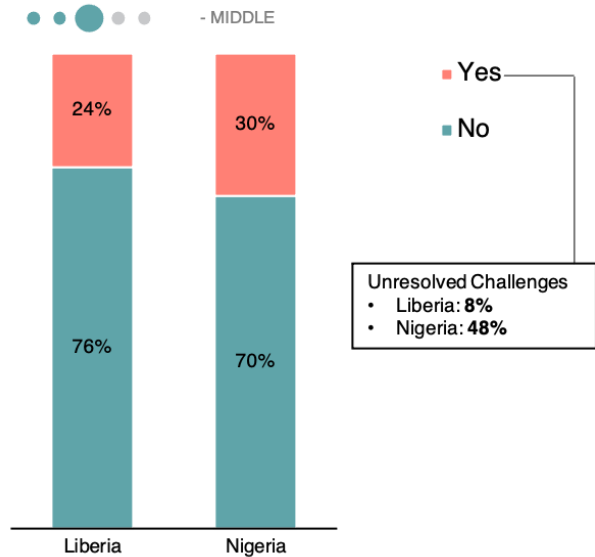


Figure 19. Ease of use and challenges with brace

Summary

Through a rigorous impact measurement surveying methodology and analysis of 200 Nigerian and Liberian parents and guardians, we find that the majority of children receiving MiracleFeet treatment experience meaningful improvements in quality of life. The increased quality of life is attributed to improvements in their child's ability to move, stand, play, and forge positive relationships.

Though our organisations passionately strive to reduce stigma of disabilities through education, advocacy and social participation, people with clubfoot still unfairly experience stigma and social limitations. For parents and guardians who seek out corrective treatment for clubfoot and use a MiracleFeet brace, the data and insights showcased in this impact report demonstrates that treatment can help children to avoid stigma and enable full social participation and inclusion for the vast majority of users.

Parents and guardians of children undergoing Miracle Feet brace treatment are highly satisfied and loyal towards the company, with a Net Promoter Score[®] of 88.

Therefore, based on the data and insights in this report, we can say that MiracleFeet are having an overwhelmingly positive impact on the lives of children in Liberia and Nigeria.

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- [2] Pediatric Manual Medicine, "Clubfoot," ScienceDirect, 2009. [Online]. Available: <https://www.sciencedirect.com/topics/medicine-and-dentistry/clubfoot>. [Accessed 14 September 2021].
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Appendix

| Metric | Calculation |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Net Promoter Score® | The Net Promoter Score is a common gauge of guardian loyalty. It is measured through asking guardians to rate their likelihood to recommend your service to a friend on a scale of 0 to 10, where 0 is least likely and 10 is most likely. The NPS is the % of guardians rating 9 or 10 out of 10 ('Promoters') minus the % of guardians rating 0 to 6 out of 10 ('Detractors'). Those rating 7 or 8 are considered 'Passives'. |
| Inclusivity Ratio | The Inclusivity Ratio is a metric developed by 60 Decibels to estimate the degree to which an enterprise is reaching less well-off guardians. It is calculated by taking the average of Company % / National %, at the \$1.90, \$3.20 & \$5.50 lines for low-middle income countries, or at the \$3.20, \$5.50 and \$11 lines for middle income countries. The formula is: |

$$\sum_{x=1}^3 \frac{([Company] Poverty Line \$x)}{(Country Poverty Line \$x)} / 3$$