

**Listening to the Ga:  
Cicely Williams' Discovery  
of Kwashiorkor on the Gold Coast**

*J. Stanton*

Cicely Williams' career illustrates several themes which are relevant to 'women in modern medicine'. As a woman doctor, qualified at the end of the First World War, when male doctors were returning from the front, she faced impossible odds in securing a job in England, so worked overseas and trained in tropical medicine. In 1929 she entered the Colonial Medical Service in a post specifically earmarked for women: a Woman Medical Officer concerned with maternal and child health, in what was then the Gold Coast colony under British control. Since this was 'women's work', she was paid at a lower rate than equivalent male medical officers, a discriminatory distinction to which she strongly objected.<sup>1</sup> Her role was supposed to be to hand out advice in clinics, and treat acutely ill infants in hospital, but she rapidly established the need for comprehensive medical services to sick infants, and in addition conducted clinical research.

As well as being a woman in a man's world, Cicely Williams in the Gold Coast was a woman practising modern medicine, which in that place and time takes on particular dimensions. She was a representative of Western medicine in a colonial setting, where western medicine opposed traditional medicine just as Western religion opposed traditional religion: both medicine and religion can be seen in different ways as 'ambassadors' of the colonial enterprise.<sup>2</sup> Going a step further than many Western doctors, she 'discovered' a new disease, using scientific methods, which typify our notion of 'modern medicine', though operating within the restricted circumstances of the colony. It was the rejection of her findings on *kwashiorkor* that revealed the gender biases in the medical profession most strongly.

The story of Cicely Williams' discovery of kwashiorkor, followed by the prolonged opposition of members of the male medical establishment, has been told before, as a classic tale (in the mould

once popular in history of medicine) of a pioneer struggling for recognition.<sup>3</sup> It can be read more specifically as an indictment of prejudices against women and those on the peripheries of professional power – here, in two senses: the colony as periphery to the metropolis, and maternal and child work as undervalued periphery to more central branches of medicine.

But as suggested in the title of this paper, there are other instructive lessons in Williams’ approach. ‘Listening to the Ga’ is here intended to

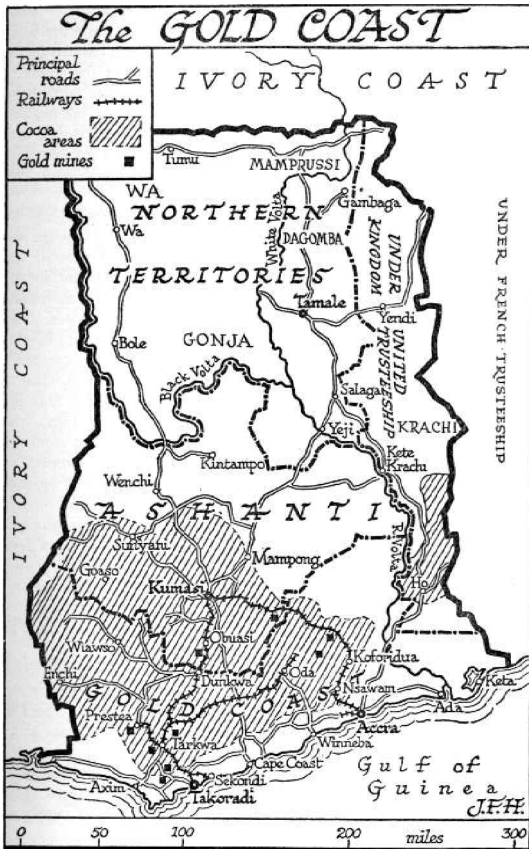


Fig. 1

[Map] The Gold Coast in the 1930s. (From Bourret) With kind permission the Oxford University Press.

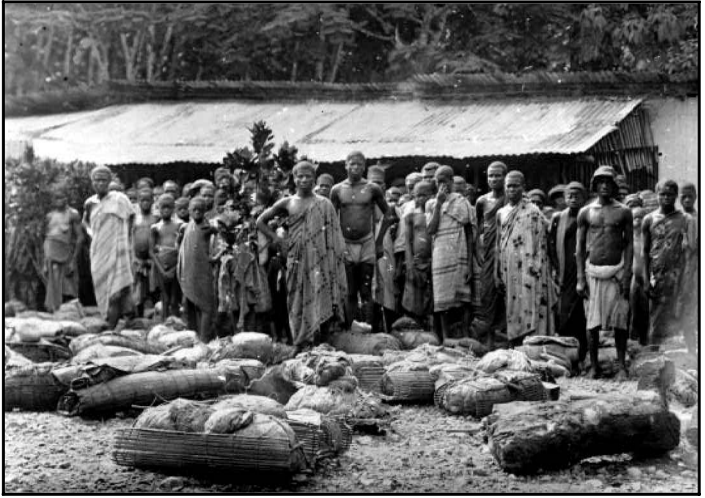
imply sensitivity to both the language and the people of the Gold Coast. Such sensitivity was not common, either among doctors serving colonial peoples, or those treating the poorer classes at home; nor was it common among colonial officials more generally. Cicely Williams was not sensitive as in 'delicate' – she was an extremely strong-willed and tough woman – but perhaps partly thanks to her childhood in Jamaica, she seems to have responded to the Gold Coast people she met in a far more empathetic way than most European colonials.<sup>4</sup>

Thus she listened to the Ga language and used its term for the 'disease of the deposed child', *kwashiorkor*, a word she later said nobody mentioned in front of her for her first three years, because it carried such dire associations.<sup>5</sup> And she listened to the Ga people, mainly mothers and grandmothers she met in association with the infants she treated; but also nurses and traditional healers or 'witchdoctors'. Though highly critical of many 'traditional' beliefs and customs, Williams seems to have recognised that there was wisdom, too, to be gathered from local people. Her use of the vernacular term for the disease which she described revealed respect for local interpretations: this may have been an additional reason she met with such strong resistance from pillars of Harley Street.

For readers unfamiliar with the disease, it may be appropriate here to offer a definition, with the caveat that descriptions and interpretations of *kwashiorkor* have changed over time. This is a severe form of malnutrition in infants, which differs from wasting. The chief signs are oedema (watery swelling), lassitude and irritability, a darkening and peeling of the skin at points of flexion and pressure, sometimes accompanied by reddish colouration of the hair, changes in the liver, and – without suitable treatment – rapid decline and death. Arguments in the 1930s and 1940s centred on whether the disease was a distinct new entity or a form of pellagra, while debate in recent decades centred on whether this was 'protein malnutrition' as Williams suggested, or a form of calorie malnutrition. This paper will not attempt to discuss the recent arguments.<sup>6</sup>

### **The Gold Coast colony: background to infant welfare**

The British (and French) had long been established on the coast of West Africa, in ex-Portuguese or Dutch slaving or trading forts and coastal enclaves. The Gold Coast was finally demarcated and taken by the British at the Berlin Conference of 1884-5, the resolution of the 'Scramble for Africa' between the imperial powers of Europe. (Fig. 1)<sup>7</sup> Despite the colony's name and continuing gold production, especially in the Asante region,<sup>8</sup> by the early twentieth century gold



**Fig. 2**

Local producers selling cocoa, palm oil and rubber at trading station.  
Harry Martin, Gold Coast, 1902–6. With permission of Rhodes House  
Library, University of Oxford

was being overtaken as the main export by cocoa, grown by thousands of independent peasant farmers.<sup>9</sup> (Fig.2)<sup>10</sup> The colonial government did not encourage settlement by Europeans, either near the coast nor inland where it operated a policy of ‘indirect rule’ through local chiefs.<sup>11</sup> There was thus less displacement of communities (in the post-slaving era) than in colonies under harsher colonial regimes, but indirect European influence was visible in the introduction of western trade goods, (Fig. 3)<sup>12</sup> and the development of European-educated elites in the coastal towns and inland Kumasi, capital of Asante. (Fig. 4)<sup>13</sup>

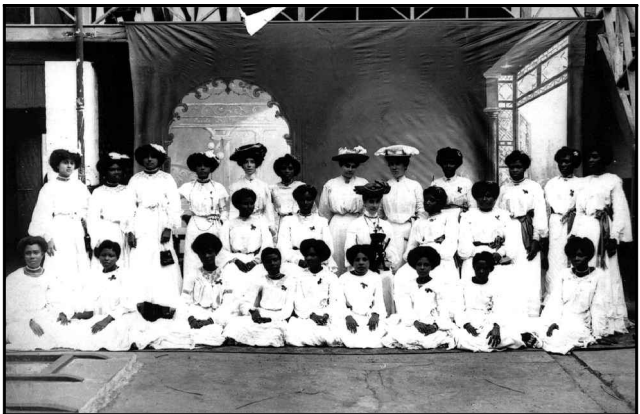
As in other West African colonies, there were enormous variations in living standards in the Gold Coast: both within the cities, where African doctors, lawyers and teachers had already become established prior to British rule,<sup>14</sup> and also in the countryside where chiefs and other wealthy men could afford large households with many wives and children, while poorer families might struggle to survive. Although cocoa farming by indigenous producers seems to suggest widespread prosperity, the effect on production of local food crops was to create scarcity and drive up prices, an instance of a more general pattern discussed in recent historiography.<sup>15</sup> It was also



**Fig. 3**

Onitsha store. Harry Martin, Gold Coast, 1902–6.

With permission of Rhodes House Library, University of Oxford.



**Fig. 4**

Untitled group of young women. Harry Martin, Gold Coast, 1902–6

With permission of Rhodes House Library, University of Oxford.



**Fig. 5**

“Beginya’ Ba” (come-and-stay) child with father. Photograph taken by R. S. Rattray while Head of Anthropology, Gold Coast, 1921–32. With permission of Pitt Rivers Museum (School of Anthropology and Museum of Ethnography), University of Oxford.

noted by observers at the time, in the case of the Gold Coast by W. Ormsby-Gore, Under-Secretary of State for the Colonies, on a visit in 1926.<sup>16</sup> He laid great stress on the food question and overtly linked it with national efficiency and infant mortality:

There are few parts of the world where the study of dietetics is more important than in Africa. It affects not only the question of the efficiency of labour, but also public health, and particularly infant mortality.<sup>17</sup>

The aim of progress and development, central to the colonial undertaking, was seen to depend on better food supplies.<sup>18</sup> Whereas a

major motive behind infant welfare in Britain was provision of soldiers to defend the Empire,<sup>19</sup> here it was primarily a matter of economic advance.

Along with many other British exports, the Gold Coast received concern over infant mortality. Attempts to enumerate the population – very partial and inaccurate – were supplemented in 1917 by a survey of infant mortality in Accra, which generated alarming statistics: apparently nearly half the babies died in the first year of life.<sup>20</sup> Among a tranche of welfare measures introduced by the progressive post-war Governor, F. G. Guggisberg, was government provision for infant welfare work, previously the prerogative of missionary groups.<sup>21</sup> Reviewing the situation towards the end of his term of office, Guggisberg speculated on infant mortality at the turn of the century: it ‘must have been appalling’ in view of the crowded and insanitary housing conditions. Still in 1921, as organised clinics were instituted, some towns reported infant mortality rates of over four hundred per thousand, due in Guggisberg’s view to ‘the housing, the customs and the habits of the people’.<sup>22</sup>

The new facilities offered by the government were certainly popular. Infant welfare clinics which opened in the main towns, with several in Accra, rapidly attracted thousands of attendances a year.<sup>23</sup> In 1926, Princess Marie Louise Hospital for children opened in Accra, to provide the main infant and child welfare (outpatient) centre as well as acute services. Guggisberg placed these at the centre of his programme:

The various clinics now opened for Infant Welfare work represent the beginnings in the Gold Coast of the new Public Health, and in conjunction with improved education will help to instil into the minds of the people that the quest and attainment of health should be a personal matter of supreme importance, which, if they are willing to learn ... will change the whole history of their country for the better.<sup>24</sup>

It was into this atmosphere of encouraging self-improvement, reminiscent of ‘educating the mothers’ in the UK,<sup>25</sup> that Cicely Williams was appointed Woman Medical Officer in 1929.

### **Cicely Williams and kwashiorkor**

Of course Cicely Williams was not alone in attempting to understand the language and beliefs of the Africans she worked amongst. In the Gold Coast, as in other colonies under each of the colonial powers, professional agents were appointed to interpret the alien world of ‘the natives’ for the colonisers: government (and free-

range) anthropologists can be seen as serving this function, as well as carrying out their own intellectual programme. Nor was Williams the only doctor to double as amateur anthropologist. Colonial officials of all grades seem to have dabbled in anthropology,<sup>26</sup> but doctors were especially tempted as the eugenic end of their scientific understanding alerted them to the fine line between racial and cultural difference.<sup>27</sup>

Two specific examples may serve to illustrate Williams' approach. First, we may examine a photograph taken in the 1920s by R. S. Rattray, government anthropologist, of a *Beginya'Ba* or 'come-and-stay' child whose parents deliberately dressed her untidily and left her hair dishevelled in the hope of deceiving the spirits who had taken their other children. (Fig. 5)<sup>28</sup> Now compare this with one taken by Williams in the 1930s, of an older girl, described as a *fahit* or fetish child. (Fig. 6)<sup>29</sup> Rattray's picture places the child on her fond father's lap; it is a beautiful study of parental love. Williams' shot appears more clinical, but the accompanying note that '8 elder siblings died' shows that she enquired into the family circumstances, while the recording of the child's name (Ahana) indicates personal contact.

Similarly, Williams recorded names of nurses holding two infants, whom she described as the only abandoned babies she ever saw in the Gold Coast. (Fig. 7)<sup>30</sup> She believed abandonment was extremely rare, compared with European societies. Correlating the locations where these babies were found – one beside the railway and the other on a golf course – with European infiltration, Williams saw their fate as symbolic of the dislocation brought about by colonial rule, a theme amply developed in contemporary anthropological writing, especially on southern Africa.<sup>31</sup>

However, Williams was not anti-colonial at this stage, nor did she hold a rosy view of African mothers' childrearing skills; although she commended maternal devotion, she was critical of what she saw as the indulgent, unregulated regime adopted towards young infants. Much can be learned of her views from her MD thesis which permitted fuller expansion than any of her articles. Perhaps unconsciously drawing a contrast with her own heavy burden of work, she likened mothers playing with their babies' beads to neurotic chain smokers, and ascribed adults having an infantile craving to have something always in their mouths to their constant snacking as infants. Her observations on weaning are perhaps more objective:

[The young infant is] carried about on the mother's back, a position





Fig. 6

'Fahit' or fetish child Ahana. Cicely Williams, Gold Coast 1933–5. With kind permission of Contemporary Medical Archives Centre, and Medical Photographic Library, at the Wellcome Library.

it loves, it sleeps close beside her, it is nourished whenever it cries, and on the whole it does remarkably well on this treatment ... I have seen the most uncomprehending indignation, rage and bitterness in a child of three years old who found that his place on his mother's back was suddenly usurped by a new baby.<sup>32</sup>

The identification of a weaning crisis was intimately tied in with Williams' recognition of *kwashiorkor*, which in the main struck children between the ages of two and four, and nearly always proved fatal.

By the time she wrote her MD thesis in 1936, Williams calculated that she had treated about 100,000 children in clinics in the Gold Coast. Reasons for the high morbidity and mortality, the subject of her thesis, were wide-ranging, in many cases similar to those in Europe, and largely preventable in Williams' view.<sup>33</sup> On one



Fig. 7

Abandoned babies, with nurses. Cicely Williams, Gold Coast 1933–5.  
With kind permission of Contemporary Medical Archives Centre, and  
Medical Photographic Library, at the Wellcome Library.

hand she indicated poverty was the underlying cause, giving a radical prescription: ‘The function of a medical department conducted by any government is to raise the standard of living rather than to provide orthodox medical attention for the individual’.<sup>34</sup> On the other hand, she held that the ‘unspeakable’ loss of health and life among children was ‘all due to ignorance and dirt and disease’.<sup>35</sup> Her unifying theme was the need for civilisation.

The enlightened but paternalistic approach of the Guggisberg type of progressive colonial is reflected in Williams’ attitudes. However, her arguments for combining preventive and curative medicine caused her to clash with her immediate superiors, in whose view the preventive work was not her job – although, much later, Williams’ views won her the title of ‘primary health care pioneer’.<sup>36</sup> Nutritional disorders amply illustrated the need for a combined approach. As long as she worked in the Gold Coast, treating sick children, the hopelessness of cases of *kwashiorkor* drove Williams to seek to understand the syndrome, which was not described in any of

the medical texts she consulted. Her first published account appeared in the departmental report in 1932,<sup>37</sup> and was so striking that her former teacher, Helen MacKay (of Queen's Hospital, London), encouraged her to seek publication in the prestigious journal, *Archives of Disease in Childhood*; her first classic article appeared in 1933.<sup>38</sup>

Battle was joined immediately, with H. S. Stannus, an established expert on nutrition, countering Williams' view that this was a new disease. Stannus, who had worked as a Medical Officer in Nyasaland (later Malawi) and Tanganyika between 1906 and 1918 and was regarded as an expert on deficiency diseases among Africans, claimed that the condition must be simply an infantile form of pellagra.<sup>39</sup> Despite inclusion of photographs in Williams' 1933 article showing a distribution of darkened, peeling skin on infants which was entirely unlike that characteristic of pellagra, Stannus, without having himself seen such cases, dismissed her observations. Williams assembled details of a further sixty cases and drew up a comparison between *kwashiorkor*, as she now termed it, and pellagra, in a *Lancet* article in 1935.<sup>40</sup> Micrographs of skin and liver, amplifying clinical and post-mortem observations, represented 'scientific' medicine at a fairly advanced level for an African colony, available in the pathology laboratory at Accra's main hospital. Again, Stannus followed Williams in print to challenge her interpretation.<sup>41</sup> Far from being swayed by the scientific element in her presentation,<sup>42</sup> he seemed incensed by her adoption of a 'native' word for the condition.

The association with a maize diet indicated by Williams has been seen as misleading: later recognition of the prevalence of the disease in areas where other staples dominated showed that maize was in no sense the cause.<sup>43</sup> But Williams made an important connection when she pointed out that *arkassa*, the fermented maize food usually given to infants, contained yeast, which was supposed to cure pellagra. One of the leading investigators who followed Stannus' line, Hugh Trowell in Uganda, administered nicotinic acid (the active anti-pellagra compound in yeast) to *kwashiorkor* sufferers in the early 1940s without any success.<sup>44</sup> Nevertheless, Trowell persisted in avoiding the term *kwashiorkor*, switching from 'infantile pellagra' to 'malignant malnutrition'.

Possibly, Williams drew attention to maize – knowing that pellagra was associated with a chiefly maize diet in the southern USA – in order to point out the differences between pellagra and the condition she was observing. Certainly, she was careful to show differences in the skin lesions and other features of the two diseases; she also offered differential diagnoses in relation to 'pink disease',

vitamin A deficiency, and vitamin B1 and B2 deficiencies. She was certainly thinking in terms of deficiency, adding: 'No tests for mineral or protein deficiency have yet been made'.<sup>45</sup> In her 1933 paper, she suggested several possible causes, stating: 'As maize was the only source of the supplementary food, some amino-acid or protein deficiency cannot be excluded as a cause'.<sup>46</sup>

As for treatment, Williams tried varied diets without success: combinations with butter, eggs, tomato, orange, liver, Marmite, yeast, Bemax, iron and arsenic failed to reverse the symptoms. The only food that seemed to work, and then in only a few cases, was tinned milk: 'Nestlé's sweetened condensed milk with cod-liver oil and malt seemed to be the most successful line of treatment'.<sup>47</sup> So impressed was she with these rare successes, that she wanted to offer a chart showing a child patient's recovery for use by Nestlé, in promoting milk consumption. Her immediate superior in the Health Service saw 'no reason why Messrs Nestlé's should not make use of this chart', but the Governor signalled disapproval: 'The value of these tinned milks is well known', and more importantly, Nestlé was no better than other brands and was not a British firm.<sup>48</sup> (As will appear later, by the end of the 1930s Williams reversed her views and condemned tinned milk.)

If a breastmilk substitute was needed, Williams argued, tinned milk was the most convenient. Tsetse-borne disease made cattle rearing nearly impossible in this region; while goats' milk could theoretically be used, the local goats 'are never milked, and they do not look as if the idea of milking had ever been mentioned'.<sup>49</sup> Advocacy of tinned milk was widespread among colonial doctors, although there seems not to have been a concerted effort to dissuade mothers from breastfeeding in British colonies, as there was in the Belgian Congo 'Gouttes de Lait'.<sup>50</sup> Purcell, a male Medical Officer practising further west in the Gold Coast at Oda, gave a glowing description of 'baby Kofi' whose mother had died the day he was born and who was raised on tinned milk and orange juice: '... plump, robust and constantly cheerful ... The healthy gleam of his eyes was sufficient to distinguish him from the other babies, all of them breast fed'.<sup>51</sup> Purcell mentioned the Belgian Congo model to support his view.

In describing cases very similar to those observed by Williams, Purcell chose the heading 'Infantile pellagra (Akwashiokor – Williams)'.<sup>52</sup> He recorded an invariably fatal outcome despite large doses of Marmite, and admitted his 'description tallies closely with that of Dr Williams, but my conclusions differ from hers, as she considers the condition distinct from pellagra'.<sup>53</sup> Purcell paid attention

to local interpretations in his discussion of oedema, which was one of the symptoms of *kwashiorkor* but also of many other diseases:

In Akim the importance of oedema as a sign of disease may be inferred from the fact that my informant, a reputable and intelligent “native doctor”, professes to recognise some five clinical varieties ... *Owuo Mpumpungya* is a name given to a disease in which the body swells gradually, the skin peels off ... (This resembles the syndrome “akwashiorkor” described by Williams.)<sup>54</sup>

Purcell noted the informant’s view that the syndrome often appeared after a serious case of measles; also, strikingly, the belief that it was ‘caused by witches who put the victim into “invisible fire”, or boil him’ because the victim looks boiled.<sup>55</sup> In the 1950s, when Williams visited Tanganyika, she was shown the body of a child in Dodoma Hospital mortuary, described as ‘a terrible burns case’, but she recognised the signs of *kwashiorkor*.<sup>56</sup> In this and possibly in many similar cases, Western doctors accused parents of scalding their children through using over-hot bath water.

By the time Purcell wrote his book, Williams was no longer in the Gold Coast. Following a dispute with Dr G. S. Selwyn-Clarke, Deputy Director of Health Services, regarding the treatment of one of her infant patients, she was summarily transferred in 1936 from her Gold Coast post to Singapore. Williams had admitted into hospital an infant with non-infectious tubercular peritonitis, whom the Deputy-Director then decided to exclude: Williams had protested vociferously. Although apparently concerned with the interpretation of rules on admitting patients with tuberculosis, the dispute was almost certainly fuelled by antagonism between two strong characters with rather different ideologies.<sup>57</sup> Williams was on leave in England when news of her transfer reached her, and she had to depart without her belongings and many of her clinical notes; however she had brought some with her for completion of her MD thesis. Further observations on *kwashiorkor* were ruled out since it did not appear to occur in Malaya, where wasting (marasmus) was a common form of severe infant malnutrition. Williams’ views on the use of tinned milk evolved very rapidly in her new posting: in 1939 she delivered a stinging and prophetic talk to the Rotary Club entitled ‘Milk and Murder’ condemning promotion of tinned milk to local mothers in tenements by young women dressed like nurses.<sup>58</sup>

Williams was imprisoned in Changi Gaol when the Japanese occupied Singapore. Trowell greeted Williams on her release at the end of the war with a letter saying he would like to meet her, ‘if only

to tell you that you were right. Kwashiorkor is not pellagra'.<sup>59</sup> However, his latest article used the term 'The kwashiorkor syndrome of malignant malnutrition', to cover what he believed to be variants of the condition in children and adults; and his failure to absorb the lessons of Williams' work was reflected in his enthusiasm for trials of desiccated hog's stomach as a cure. Failure to appreciate Williams was also evident in the comments that ended his letter: 'How curious that almost *all* African tribes have their name for this disease + what a pity we could not learn from them. It affects millions.' Williams had shown an ability to 'learn from them' throughout her spell in the Gold Coast.<sup>60</sup>

In 1948, Williams was appointed first head of the Maternal and Child Health (MCH) section at the World Health Organization (WHO) in Geneva. Although she held the position briefly before transferring to head MCH for WHO in South East Asia, her tenure may be connected with the launch of a survey of *kwashiorkor* throughout sub-Saharan Africa in 1950, resulting in a report published in 1952.<sup>61</sup> From evidence gathered in ten countries, the authors surmised that *kwashiorkor* was 'the most serious and widespread nutritional disorder known to medical and nutritional science'.<sup>62</sup> Williams was well and truly vindicated – as were the Ga and many other African peoples who had named the disease.

### Discussion

Baumslag opines that Williams fulfilled 'a physician's dream: to diagnose, find the causative agent, and cure' for a new disease; she had also discovered a means of prevention, by supervision at MCH clinics.<sup>63</sup> Trowell paid respect to Williams in his book on *kwashiorkor*, but provided many other precedents, among whom he cited Gelfand in Rhodesia and Altman in South Africa as 'pioneers', diminishing the pre-eminence of Williams in providing the definitive description.<sup>64</sup> The balance probably lies somewhere between these two, since it is clear that Williams was still struggling to find the exact cause, and an effective cure, when she was transferred from the Gold Coast in 1936. On the other hand, the 1952 WHO report by Brock and Autret (referred to above) which Trowell says was 'crucial' in ensuring recognition of the disease, would probably not have come about without Williams' work.

An equally important question for the historian – more important for those not too worried about precedence – is this: where does Williams' work fit into the development of nutrition studies? Discussing the general area of the discovery of colonial malnutrition

in the interwar period, Worboys poses three rival interpretations.<sup>65</sup> First, there had long been problems of inadequate diet in the tropics, but these were hidden until the new science of nutrition revealed them. Second, population growth was outstripping the food supply (the neo-malthusian argument), perhaps because western medicine and colonial development was allowing more rapid population growth. Third, the dynamics of colonial intervention, especially the shift away from food crops towards cash crops for export, created an epidemic of malnutrition. Was there an old problem newly revealed, a new problem due to population growth, or a new problem due to dislocation?

These interpretations were current at the time, and lingered on into post-colonial consciousness. Worboys shows that in the 1930s, the supposed objectivity of the science of nutrition could be used in opposite ways: to argue for radical programmes, or on the contrary to depoliticise the problem of nutrition. He concentrates on the transfer of a scientific tool, the dietary survey, from the centre to the periphery, especially the series of surveys conducted between 1936 and 1939 for the Report on Nutrition in the Colonial Empire.<sup>66</sup> Britain's concern with the world economic recession, and its desire to rationalise agricultural production in its dominions and colonies, influenced the outcome. Evidence gathered by the surveys tended to point towards a recent origin for the problem of malnutrition, and suggested it had only recently been identified, but this did not emerge in the final report. Worboys argues that the problem was redefined before final drafting, the emphasis moving from political economy to 'native education' in matters of agriculture and diet: 'Colonial malnutrition was rapidly and readily reconstructed from being seen as an epidemic problem to an endemic one, for which colonialism had little responsibility and over which it could exercise little control'.<sup>67</sup> Thus the critique was shifted away from inappropriate structures of the colonial state, towards inadequate knowledge of the local population.

Though nutrition was a more universal science than tropical medicine or tropical agriculture, colonial medical officers working 'on the ground' differed from nutrition experts in Britain, according to Worboys. With a general concern over the lowering effects of a poor diet, many saw a preoccupation with deficiency diseases as 'Eurocentric'. Williams and Purcell in the Gold Coast, Trowell in Uganda and others in southern Africa do not seem to fit this characterisation, as they searched for the missing factor in *kwashiorkor*. But these researchers each had their own account of

larger questions underlying malnutrition. Williams and Purcell showed striking differences, fitting two of Worboys' three rival interpretations.

Williams regarded the Gold Coast as a prosperous country with adequate food supplies; she included in her thesis a list of food prices in Kumasi market to demonstrate the affordability of tinned milk. Failure to provide weanlings with a balanced diet was due to ignorance, milk could be provided for orphans or as a supplement by any family. Purcell, in contrast, saw dislocation under colonial rule as creating new problems. He drew an association between cases of severe malnutrition – probably *kwashiorkor* – in Koforidua and the cocoa hold-up of 1937 which 'caused much economic hardship: labourers were not paid. As a class the local Kotokolis were underfed; infantile pellagra among them in 1938 was probably associated'.<sup>68</sup> But when it came to prescriptions for change in health provision, Williams offered a radical programme, in her vision of health centres offering integrated preventive and curative services, taking the place of hospitals.<sup>69</sup> Purcell, also radical, was employed to conduct the Gold Coast nutrition survey and ran into trouble with pictures he took in the Northern Territories indicating that people were starving: the government suppressed their publication.<sup>70</sup>

Neither Williams nor Purcell opted for the 'technical fix' of agricultural programmes to counter malnutrition; nor did Williams, for all her emphasis on health education, neglect the need for medical treatment alongside advice – and she saw the need for improvements in living standards, too.<sup>71</sup> Two doctors holding opposing interpretations (nutrition problems old, due to ignorance; or new, due to colonial intervention) could challenge the colonial authorities in different ways.

In terms of practice, Williams' ability to head for the centre of a problem, untrammelled by awe of 'experts', enabled her to develop a plan for primary health care as well as to discover, for western medicine, *kwashiorkor*. Trowell's gender-conscious formulation was unfortunately patronising: 'Being a lady, and a very gracious lady at that, she arrived by instinct at the correct answer'.<sup>72</sup> In the midst of the discovery of colonial malnutrition, *kwashiorkor* went unheeded, for reasons which this paper has suggested were connected with Williams' peripheralization as a woman medical officer in the colonial medical service. But while the Report on Nutrition in the Colonial Empire sank almost without trace under wartime bombardment of more urgent issues, Williams' discovery emerged more strongly after the war than before, while her views on primary



health care became almost gospel for the next generation. The question we end with is probably unanswerable: did Cicely Williams evolve her views on primary health care through listening to local people, or did she listen to people because of her views? Certainly in the case of *kwashiorkor*, she marked her respect through using the Ga name for a disease that people in many parts of Africa (as well as South America) had long recognised.

### Acknowledgements

Wellcome Trust Grant No. 16043/1.11 supported research on which this paper is based. Versions of the paper benefited from discussion by seminar audiences at the Wellcome Unit for the History of Medicine and the Department of Paediatrics at Oxford, the London School of Hygiene and Tropical Medicine, and the former Wellcome Institute for the History of Medicine in London. I would also like to thank William Beinart for helpful comments on a draft of the chapter.

### Notes

CMAC = Contemporary Medical Archives Centre at the Wellcome Trust Library, London

RCS = Royal Commonwealth Society, London

RH = Rhodes House, Oxford

1. K. David Patterson, *Health in Colonial Ghana. Disease, Medicine and Socio-economic Change 1900-1955* (Waltham, Mass: Crossroads Press, 1981), 15: she reminded her superiors that 'medical training for a woman costs as much as for a man'.
2. On medicine, see: D. R. Headrick, *Tools of Empire: Technology and European Imperialism in the Nineteenth Century* (New York: 1981) – but Headrick overemphasises the role of quinine prophylaxis in 'opening' West Africa. On religion, see: R. I. Rotberg, *Christian Missionaries and the Creation of Northern Rhodesia* (Princeton: University of California Press, 1965). On both, see: T. O. Ranger, 'Godly medicine: the ambiguities of medical mission in south-eastern Tanzania, 1900-1945', in S. Feierman and J. M. Janzen (eds), *The Social Basis of Health and Healing in Africa* (Berkeley: University of California Press, 1992), 256–82.
3. Sally Craddock, *Retired Except on Demand: the Life of Dr Cicely Williams* (Oxford: Green College, 1983); H. Trowell, J. Davies and R. Dean, *Kwashiorkor* (New York and London: Academic Press, 1982; Nutrition Foundation Reprint: original edition, London: Edward Arnold, 1954), opens with Hugh Trowell, 'The beginning of

the kwashiorkor story in Africa', which proffers something of an apology for his resistance to Williams' ideas.

4. Interviews with Dr Cicely D. Williams in Oxford, 16 April and 4 September 1985. See also: J. Beinart, with Robert King and Simon Binney, 'Cicely Williams: memoirs of a doctor', *History Workshop Centre for Social History Newsletter*, 3 (Dec 1985), 69–80.
5. *Ibid.* When a version of this paper was given at the Wellcome Symposium in Nov 1994, the daughter of a former Medical Officer in the Gold Coast commented that Williams did not actually speak Ga. She would have had local staff to translate; but her biographer asserts that, as well as being required to pass an exam in a local language to satisfy government regulations, Williams wished 'to communicate freely' with patients in their homes: Craddock, *op. cit.* (note 3), 56.
6. My understanding is that *kwashiorkor* came to be regarded as protein-calorie malnutrition.
7. From: F. M. Bourret, *The Gold Coast. A Survey of the Gold Coast and British Togoland 1919-1946* (London: Geoffrey Cumberlege for Oxford University Press, 1949), 5.
8. A. W. Cardinall, *In Ashanti and Beyond* (London: Seeley, Service & Co, 1927); H. J. Bevin, *Economic History of the Gold Coast, 1874-1914* (Legon: University of Ghana Press, 1960). Asante was transcribed 'Ashanti' during the colonial period.
9. Polly Hill, *Migrant Cocoa Farmers of Southern Ghana* (Cambridge: Cambridge University Press, 1963).
10. RH.MSS.Afr.s.611(1)/10: H. Martin, Gold Coast, 1902-1906, 'Small chief bringing in cocoa, palm oil and rubber for sale'.
11. Largely due to opposition to land alienation by Aborigines Rights Protection Society, an alliance of local elite and traditional rulers formed in Cape Coast in 1897. Under indirect rule, chiefs were appointed by the British in the case of acephalous societies, or where existing rulers were troublesome to the colonial powers.
12. RH.MSS.Afr.s.611(3), H. Martin, Gold Coast 1902-6, 'Onitsha store', two mothers with babies, one breastfeeding, girl with tins of corned beef on verandah.
13. RH.MSS.Afr.s.611(3), H. Martin, Gold Coast 1902-6, untitled photograph of group of Gold Coast young women dressed in white Edwardian-style dress.
14. M. J. Sampson, *Gold Coast Men of Affairs* (London: Dawsons, 1969; first published 1937), provides a splendid review.
15. J. Tosh, 'The cash crop revolution in Tropical Africa: an agricultural reappraisal', *African Affairs* 79 (1980), 79–94.

16. Cmd.2744 (1926), Report by Hon W. G. A. Ormsby-Gore on his Visit to West Africa, in G. E. Metcalfe, *Great Britain and Ghana: Documents of Ghana History 1807-1957* (London: Thos Nelson & Sons, 1964; for University of Ghana), 613.
17. *Ibid.*
18. For analysis of gender dimension of food and cash-cropping, highly relevant to child health, see: Jane Guyer, 'Food, cocoa, and the division of labour by sex in two West African societies', *Comparative Studies in Society and History*, 22 (1980), 255–73.
19. Anna Davin, 'Imperialism and motherhood', *History Workshop Journal*, 5 (1978), 9–65.
20. Patterson, *op. cit.* (note 1), 23 refers – without IMR figures – to 'Report of the Committee on Infant Mortality in Accra', 31 August 1917, and 'Conference on Infant Mortality in the Gold Coast', 14 September 1920 (both in Ghana National Archives); *ibid.*, 91, gives Accra's IMR as 483 in 1918, 405 in 1920 – with caveat that births were less completely registered than deaths; from 1930 till 1950 level was around 110 per thousand.
21. Patterson, *op. cit.* (note 1), 23; Jennifer Stanton, 'The rise and fall of state provision of infant welfare services in the Gold Coast, 1919-1939', paper for Health and Empire seminar, Institute of Commonwealth Studies, London, 4 December 1992.
22. Sir Frederick Gordon Guggisberg, Governor ... of the Gold Coast Colony and its dependencies [1919-1926], *Review 1900-1926, prospects for 1927-1928* (Accra, 3 March 1927), 189.
23. Stanton, *op. cit.* (note 21).
24. Guggisberg, *op. cit.* (note 22), 190.
25. Among the large literature on this, the classic remains Davin, 'Imperialism and motherhood'.
26. Though not to the extent that they indulged in shooting animals, an extraordinarily prevalent pastime.
27. Megan Vaughan, *Curing Their Ills: Colonial Power and African Illness* (Stanford, Ca: Stanford University Press, 1991). The taste for the sensational among some such doctors is graphically present in a series of photographs showing a consultation over a sick child, involving a witch-doctor and spider – described as 'Ngam, the tarantula' – ending with flogging of child's mother: RCS.Y3043.BB/184-192: T. H. Dalrymple [Medical Officer, on semi-anthropological safari], British Cameroons, Bansa, 9 June 1939.
28. Pitt-Rivers Museum RYA.454: R. S. Rattray, Gold Coast, 1921-1932, A *Beginya'Ba* or 'come-and-stay' child on her father's lap.
29. CMAC: PP/CDW/M.24/5 C. D. Williams, Gold Coast 1933/35,

- 'Fahit (fetish) child Ahana. 8 elder siblings died'.
30. CMAC: PP/CDW/M.24/3 C. D. Williams. Note in Williams' hand gives names as: Janet Mensah (holding Kadu) and Comfort Quenor (holding ?Eleanor); also author's interviews with Williams *op. cit.* (note 4).
  31. For example: Eileen Krige, 'Changing conditions in marital relations and parental duties among urbanized natives', *Africa*, 9 (1936), 1–23, based on research in three Pretoria townships, discusses breakdown of customary relations, and very high level of illegitimacy, with burden of childrearing often thrown entirely onto woman's family.
  32. C. D. Williams, 'The mortality and morbidity of the children of the Gold Coast', Thesis for Doctorate of Medicine, Oxford, (1936), 32, 35; these observations, parallel to work on child psychology in Europe, may show influence of Williams' training as a Montessori teacher, or that of Donald Winnicott who worked at the Queen's Hospital for Children in London when Williams had a house job there.
  33. However, including 'tropical' diseases, especially malaria which remains a major cause of infant deaths to the present.
  34. Williams, *op. cit.* (note 32), 191.
  35. *Ibid.*, 190.
  36. Some fifty years later: Naomi Baumslag (ed.), *Primary Health Care Pioneer: the Selected Works of Dr. Cicely D. Williams* (Geneva: World Federation of Public Health Associations and UNICEF, 1986).
  37. C. D. Williams, 'Deficiency diseases in infants', Appendix E (Health Branch), *Report on the Medical Department for the year 1931–32* (Accra: Gold Coast Govt. Press, 1932), 93–9.
  38. C. D. Williams, 'A nutritional disease of childhood associated with a maize diet', *Archives of Disease in Childhood*, 8 (1933), 423–33.
  39. H. S. Stannus, 'A nutritional disease of childhood associated with a maize diet – and pellagra', *Archives of Disease in Childhood*, 9 (1934), 115.
  40. C. D. Williams, 'Kwashiorkor: a nutritional disease of children associated with a maize diet', *Lancet*, 2 (1935), 1151–2.
  41. H. S. Stannus, Letter to the Editor, *Lancet*, 2 (1935), 1207–8.
  42. See Trowell *op. cit.* (note 3), 'Beginning of kwashiorkor story', xxiii, on showing his own material to Stannus: 'I climbed the steps of the Harley Street consulting room of Dr Stannus in 1935. He looked long and lovingly at the photographs of the dermatosis, but he refused to look at the sections of skin, liver, and other organs'.
  43. For example: Beatrice Russell, 'Malnutrition in children under three

years of age in Ashanti, West Africa', *Archives of Disease in Childhood*, 21 (1946), 110-12. Inland from the coast, in Asante (Ashanti), the staples were root crops such as cassava and cocoyam rather than maize. Russell, who had been influenced by Williams before the war, described a condition which seemed 'identical' with *kwashiorkor*, but she hesitated to apply the term because she had 'not found it to be associated with a maize diet'.

44. Trowell *et al.*, *op. cit.* (note 3), 21.
45. Williams, *op. cit.* (note 40), 1152.
46. Williams, *op. cit.* (note 38), 433.
47. Williams, *op. cit.* (note 40), 1151. Later, it was established that absorption of food is impaired in the later stages of *kwashiorkor*, so that skimmed milk was a better treatment than full cream milk.
48. GNA 98/32: Memorandum from C. D. Williams, Child Welfare Clinic, PMLH [Princess Marie Louise Hospital] to J. M. Mackay, Deputy Director, Health Service, Accra, 18 Jan 1932; forwarded with favourable comment by Mackay; Governor's response.
49. Williams, *op. cit.* (note 32), 99.
50. Nancy Rose Hunt, "Le bébé en brousse": European women, African birth spacing and colonial intervention in breast feeding in the Belgian Congo', *International Journal of African Historical Studies*, 21 (1988), 401-32.
51. F. M. Purcell, *Diet and Ill-health in the Forest Country of the Gold Coast* (London: H. K. Lewis, 1939), 15.
52. *Ibid.*, 34. Note his mis-spelling.
53. *Ibid.*, 41; Purcell cited pre-First World War and very recent papers by Stannus on pellagra.
54. *Ibid.*, 30.
55. *Ibid.*, *idem.*
56. Baumslag, *Primary Health Care Pioneer*, 26-7, says this occurred on a 'Nuffield Visit' in 1954; Craddock however dates her Nuffield Foundation Visiting Fellowship to 1952: Craddock, *op. cit.* (note 3), 147. 'Congenital syphilis' was another very common misdiagnosis of *kwashiorkor* in E. Africa.
57. Williams, interviews, *op. cit.* (note 4); Craddock, *op. cit.* (note 3), 71. Selwyn-Clarke is said to have favoured segregation, thus representing a widespread colonial ethos: Craddock, *op. cit.* (note 3), 58, quoting from Selwyn-Clarke's contribution to Yellow Fever Conference, Dakar, April 1928.
58. Williams, interviews, *op. cit.* (note 4); Patterson, *op. cit.* (note 1).
59. C. D. Williams personal papers: Hugh Trowell to Cicely Williams, 16 September 1945. (A section of these papers were on loan to the

- author when notes were taken; they are now in CMAC, Wellcome Trust Library, London.)
60. In more ways than one; as well as the terminology for *kwashiorkor*, Williams was investigating local cures for diseases like tetanus before she was transferred, arguing that research on the 'intricate systems of medication' practised by 'bush doctors' would be rewarding: Williams, *op. cit.* (note 32), 51.
  61. J. F. Brock and M. Autret, *Kwashiorkor in Africa* (Geneva: WHO Monograph Series, No. 8, 1952); summary states (71) that survey was instigated by Joint FAO/WHO Expert Committee on Nutrition in October 1949. I have not seen the papers of this committee but would hazard that Williams had input.
  62. *Ibid.*, 72.
  63. Baumslag, *Primary Health Care Pioneer*, 16; Williams often gave visual demonstration of her belief in the value of supervision via a picture of three infants, one clinic attender aged four looking healthy and strong, flanked by two smaller six year olds, miserable and ill, who had been brought up 'in bush' without the benefit of clinics.
  64. Trowell et al, *op. cit.* (note 3), 2–8, lists about 260 reports from more than 50 countries, of 'probable cases of kwashiorkor' using local and 'scientific' names; an appendix, 283, lists over 30 vernacular names for the condition; but in discussion of terminology, 8-11, authors conclude that Williams' choice of 'kwashiorkor' was apt.
  65. Michael Worboys, 'The discovery of colonial malnutrition between the wars', in David Arnold (ed.), *Imperial Medicine and Indigenous Societies* (Manchester and New York: Manchester University Press, 1988), 208–225.
  66. Economic Advisory Council, Committee on Nutrition in the Colonial Empire, First Report, Parts I and II, 1939, Cmd. 6050 and Cmd. 6051; Worboys cites work by John Boyd Orr and the League of Nations as antecedents for this project.
  67. Worboys, *op. cit.* (note 65), 222–3. See also: J. Illiffe, *The African Poor* (Cambridge: Cambridge University Press, 1987), 160–1, on spread of drought-resistant root crops like manioc associated with shift from famine to chronic malnutrition.
  68. Purcell, *Diet and Ill-health*, 43; his views hold echoes of Ormsby-Gore's, discussed above.
  69. Williams, *op. cit.* (note 32), 194–8.
  70. For fuller discussion, see: Jennifer Beinart (Stanton), 'Darkly through a lens: changing perceptions of the African child in sickness and health, 1900-1945', in R. Cooter (ed.), *In the Name of the Child:*

*Health and Welfare, 1880-1940* (London: Routledge, 1992), 233;  
Purcell resigned 'in disgust' in 1944: Patterson, *op. cit.* (note 1), 99.

71. Williams, *op. cit.* (note 32), 190 links this with the Malthusian argument: in her view improved living standards lead to increased self-respect, which in turn leads to voluntary limitation of family size – a view she developed and promoted to the end of her long life.
72. Trowell, *op. cit.* (note 3), xxi.