Abstract
Background: Australian television news and current affairs remain an important source of information for domestic audiences about both health and low- and middle-income countries. In November 2009, the successful surgical separation in Australia of conjoined infant twins from Bangladesh generated large-scale domestic media interest.

Principal Findings: In the 66 months to October 2010, only 75 health-related stories about Bangladesh were broadcast on Sydney television, 70 of them (93%) about these twins. Drawing on the television database of the Australian Health News Research Collaboration, this paper presents a thematic analysis of the Australian television news and current affairs coverage of the twins and why their case attained such a profile relative to other coverage of health from this nation. In addition to the predictable newsworthiness of a rare and bizarre medical condition and the made-for-television tension inherent in the saga of their arrival, preparation and eventual lengthy operation, prominent themes centred around the story’s opportunities to praise Australian individuals, medical skill and national character.

Significance: The focus in this story on identified individuals with an uncommon condition requiring tertiary medical intervention only available in a high-income nation contrasts with a lack of coverage of, or critical consideration for, the well-being of anonymous individuals or less culturally-favoured groups, more long-term and mundane health considerations or any broader social or financial context to health issues in low- and middle-income countries. Reportage of foreign health issues appears contingent on the availability of populist ‘rule of rescue’ news frames, arresting footage and dramatic narratives that resonate with audiences’ expectations of such nations. The analysis offered in this paper illuminates the potential implications of such reporting for the wider news space available to health stories from low- and middle-income countries.

Introduction
On November 16-17, 2009 conjoined two-year-old Bangladeshi twins Trishna and Krishna Mallick were separated at the Royal Children’s Hospital, Melbourne during one of the longest operations ever undertaken in Australia and following 18 months’ preparation. Born in December 2006, the girls were joined at the head and later relinquished to a Dhaka orphanage by their parents who were unable to manage their daughters’ care. Here they came to the attention of an Australian volunteer, who contacted a charity that brings to Australia children needing medical treatment unavailable in their home countries. Both girls survived separation, continue to undergo physical rehabilitation in Australia and are said to be making good progress.
The global incidence of conjoined twins is between 1 in 50,000 and 1 in 100,000 live births; only between a quarter and a fifth of conjoined twins conceived survive [1,2]. The birth rate of conjoined twinning appears to be higher in low- and middle-income countries (LMICs) than elsewhere [3], probably because of the much greater availability of pre-natal care in high-income nations where conjoined foetuses would be detected and most such pregnancies terminated.

Like most LMICs, Bangladesh is seldom covered by the Australian media. Between May 2005 and October 2010, in 24,055 stories on all aspects of health and medicine broadcast on Sydney’s five free-to-air television channels, only 75 were about Bangladesh; of these, 70 (93.3%) concerned Trishna and Krishna. Their unfolding story generated huge news coverage in Australia for several weeks, across all media formats. It covered the girls’ lives and individual personalities, the minutiae of their surgical procedures, those who cared for them, the response to their successful separation in both Australia and Bangladesh, and the medical teams responsible.

News media are important sources of information about health and illness in high-income nations [4,5], although the quality and usefulness of what they present are often questionable [6]. Prevailing currents in news media coverage of health include a focus on individual behaviour and responsibility [7], emphasis on biomedical rather than preventive responses to health problems and a glossing-over of broader context and determinants of health problems [8,9]. Australian television news treatment of health in LMICs is strongly weighted toward high-profile, often exotic illnesses and conditions that tend to conform to existing perceptions and expectations of such nations, and toward stories featuring an Australian reference point [10].

The news media also act as a major source of culturally-available themes to tell – indeed, to create – popular stories of health and illness [11]. Although Trishna and Krishna’s story was ostensibly about a surgical procedure, its newsworthiness drew heavily on several familiar themes and devices: the triumph of life-saving medicine and the heroism of surgeons [12], the dramatic tension inherent in the attempt to transform two ‘monstrous’ children [4] into ordinary, ‘normal’ ones [13] and Australia’s self-conscious status as ‘the lucky country’ [14], willing and able to open its arms to those in need.

Events become news when they possess characteristics deemed to make them ‘newsworthy’. Among other common elements of newsworthiness are drama, cultural significance, connection with media consumers’ existing beliefs, rare incidents and personalisation [15]. The story of Trishna and Krishna met all these criteria. This paper explores Australian television news and current affairs coverage of the twins, its dominant themes and why it attained such a profile. Such media phenomena are significant in the context of ongoing debates in high-income nations about the veracity, depth and adequacy of media reporting about LMICs [16]. The wider public health implications of such stories’ inordinate presence in the limited domestic news space for LMIC health will also be considered.

Methods
The television coverage sample was drawn from the database of the Australian Health News Research Collaboration (AHNRC) (http://www.health.usyd.edu.au/AHNRC/index.html) which, since May 2005, has archived all health-related, free-to-air Sydney television news, current affairs and ‘infotainment’ programme items. As of October 1, 2010 the database contained 24,055 news and current affairs items. The aims, rationale and selection criteria for the database are described elsewhere [4]. All of the data sources used in this study were in the public domain and ethics approval was not required.
The 70 media items about Trishna and Krishna were subjected to qualitative analysis. We used an inductive analytical process to identify themes – recurrent, unifying concepts – in the coverage. As the news stories were examined, a protocol was established to guide further viewing and tested by comparison with further examples [17]. After truncation of sub-themes, we arrived at the three principal ones considered here. The chosen themes are consistent with the research literature in health media studies: the prominence of biomedicine and medical practitioners [18], a concern with children and child health [4,19] and the preponderance of domestic angles in Australian news [20]. In this case, reporting of the story was concerned with expensive, hospital-based treatment in Australia for two, identified children with a rare medical condition, from a country popularly understood as ‘hopeless’ following serial, if infrequent, news presentations of famine, flood and poverty over several decades. Such coverage evades news consideration of enduring and more pressing concerns about the mundane, frequently critical health needs of large numbers in Bangladesh and elsewhere which can only be ameliorated in situ.

Results

‘Medical miracles’
Trishna and Krishna’s surgery was technically impressive, medically novel and, perhaps most importantly for its appeal as a news narrative, ultimately successful. All stories about the twins were unstinting in their praise of the medical personnel involved, who were variously described as ‘well-experienced’, ‘well-prepared’, ‘amazing’, ‘heroes’ and, hyperbolically, the ‘Wizards of Oz’; the girls were ‘in the best hands in the country’. Throughout the coverage, the separation procedure was spoken of as a ‘team effort’; the constant mention of the multidisciplinary group of 16 fostered an impression both of the complexity of the operation and of the endeavours of professionals working together in the best interests of their patients. Visual elements of the news presentation reinforced this sense of scale: stock footage of the operation, used frequently by all media outlets, was a mix of close-ups of surgeons at work, shots of medical staff in concerned deliberation and panoramas showing the number of people and amount of equipment involved. The overwhelming impression was of focused, skilled, consummately caring and well-resourced medical staff.

Such qualities were distilled and accentuated in the figures of the two neurosurgeons who led the team: they ‘were on their feet the entire time’, working ‘right through the day and the night’ while other personnel took rotating shifts (the operation lasted for 32 hours). Not only were they talented, but their physical abilities apparently super-human and their power substantial, a reading underlined by the description of one as holding ‘their lives in her hands’. In all but two of 17 television clips about Trishna and Krishna during the operation, there was mention of the inherent risk: from surgical complications, post-operative infection or possible brain damage, creating a high-stakes environment in which the doctors’ skill and courage was to the fore. The surgery itself was called ‘marathon’ (in 16 stories), ‘massive’, ‘complex’, an ‘Australian first’, a ‘once-in-a-lifetime operation’, ‘delicate’, ‘intricate’, ‘epic’ – and, ultimately, an ‘against-the-odds success’. The term ‘miracle’ was most-used – on 19 occasions – in describing both the doctors (‘miracle workers’) and the girls (‘miracle twins’). After Trishna and Krishna’s release from hospital their legal guardian Moira Kelly, a practising Catholic, brought this metaphor full-circle when she affirmed her belief that the intercessions of Mary MacKillop – recently canonised as Australia’s first saint – had played a part in the girls’ survival.

The culmination of this rapturous public praise was a vice-regal reception, held in Melbourne a week after the surgery was completed. At the function, the state Premier commented that the successful surgery had ‘captured people’s imagination, it’s lifted people’s spirits, it’s a wonderful thing, in a sense, to be finishing the year with a story that is really about human spirit’. One
commercial radio host, who had advocated strongly for this formal recognition, stated that ‘it’s the least we can do’.

Innocent victims
In high-income nations, child health is frequently addressed in the news media [4,19]. Children are archetypes of vulnerability, often suggested by reference to smallness, helplessness or innocence [19] and, in this regard, Trishna and Krishna were exemplary. They were twice described as ‘abandoned’ and, in ten stories, were said to have been ‘rescued’. Two sets of stock photographs used repeatedly in media coverage showed the girls in Bangladesh, poorly-clothed, looking distressed and unwell. A series of more recent pictures, taken in Australia, presented evidence of medical intervention – one twin had a nasal tube, and both had bandaged heads – but they are now smiling, clutch stuffed toys and are well-dressed with trinkets in their hair. These representations, all highly emotive, are ideally suited to the televisual medium [21].

Further, Trishna and Krishna were presented as worthy of public action because of their personal characteristics. In addition to embodying many of the archetypal attributes of childhood, they were variously described as ‘engaging’ and ‘gorgeous little girls’, with ‘beautiful smiles’. Those who knew the twins best talked about their distinct characters and the relationship with their principal carer, Moira Kelly, was expressed as ‘a love story’. These accounts are no different to those that would be offered by almost any adult of a child in their care: cute, lovable and loved. That the girls came to public notice in Australia – thereby providing the opportunity to lavish such attention on them – was as a result of their unusual medical condition, which transformed such ‘ordinary’ traits into almost ‘against the odds’ achievements [22].

The ‘local angle’ and the ‘lucky country’
Trishna and Krishna were shown throughout their surgical journey surrounded by superlative medical, material and social support. Although ‘born without a chance’, they were promised a ‘bright future’ because they had been able to come to Australia. Indeed, the intense interest in this story is inexplicable without reference to this domestic context.

As mentioned, the medical personnel responsible for the successful surgery were handsomely praised for their individual skills, with a spokesperson from the Royal Australasian College of Surgeons extending this kudos to Australian surgeons at large. The operation was a

‘...wonderful achievement for Australian surgery; the Australian community and the world community should not be surprised really, Australian surgeons are very well-trained, highly skilled and very motivated and while this sort of operation doesn’t come along and need to be performed very often, the Australian surgeons are able to do that in all its aspects.’

The greatest single focus of positive comment was the twins’ principal carer in Australia, Moira Kelly, from the Children First Foundation. Although the girls also have a Bangladesh-Australian co-guardian, Atom Rahman, he was interviewed only eight times, whereas Kelly was featured, visually and/or verbally, in all but twelve stories. She was described as the twins’ ‘guardian angel’, ‘a humble powerhouse of determination’, ‘remarkable’ and ‘incredible’. Kelly cared full-time for Trishna and Krishna in the two years prior to their surgery and, it is assumed, will continue to do so during the reconstruction work and rehabilitation still to come. While her support team was often mentioned and thanked, she was the girls’ chief public representative. That 25 of the television stories described Trishna and Krishna as ‘orphans’, or mentioned that they were first located in an orphanage, heightened the sense of Kelly’s heroism. She is another of the ‘secular saints’ in this narrative [23]. Many news items also noted the generosity – material, financial and spiritual – of the Australian public: well-wishers called, sent cards and emailed the hospital from
across the country. One media host commented that there had been ‘such emotion shown towards these twins’, and $250 000 was donated to pay for their on-going care.

Beyond the near-ubiquitous mention of Bangladesh as the twins’ country of origin, only fifteen stories explicitly discussed that nation. These either related to the girls’ parents being located and their mother subsequently visiting Australia (eleven items) or covered reaction there to news of the successful surgery: ‘the two children have roused a wonderful bond between the country where their lives have been changed and the humble orphanage where they came from’. More broadly, there was mention of the story ‘going international’: the interest elicited among the global medical fraternity, attention from public figures – ‘even the Pope was asked to lead an international prayer vigil from the Vatican...’ – and the screening of clips about the story from overseas news services as evidence of worldwide awareness.

**Discussion**

Several inter-related elements combined to give this story the prominence it was accorded. Surgical procedures possess many of the essential features of good drama – heroes, victims, high-level technology and a life-and-death struggle [24] – all of which were present here. But popular and media interest in the story was essentially piqued by the rarity and ‘strangeness’ of the medical problem involved, with conjoined twins’ physical appearance exceeding what is understood as ‘ordinary’ for human beings [25]. In the contemporary media environment conjoined twins are contiguous with the ‘freak show’, particularly popular in nineteenth-century America until the display of congenital malformations as paying entertainment was outlawed [26]. In this case, with the twins’ separation deemed essential to both girls’ survival, no ethical dilemmas inhibited media outlets assuming the role of both partners and ‘cheerleaders’ to the task [27]; the medical outcome was later referred to as ‘quite simply, the good-news story of the year’.

An extensive literature dating back nearly 30 years has noted the disproportionately large, visible and mostly positive portrayal of medical practitioners on television [18]. Recent analyses have shown that contemporary medical dramas often present a more ambivalent portrait of doctors, [28] and that much current news coverage takes an increasingly critical stance – a consequence of such concerns as the applications of new technology, rising popular interest in alternative therapies and publicity about medical mistakes [19]. However, the medical profession in Australia continues to enjoy a strong public trust [29], and this position was strongly reinforced by the coverage of Trishna and Krishna.

Arguably the most pertinent reason that Trishna and Krishna’s story was presented in an almost entirely positive way is because they belong to a group highly valued by both modern medicine and the news media: children. The figure of the child is frequently present in coverage of LMIC health, often depicted as the innocent suffering the circumstances which instigate media attention: natural disaster, famine and conflict. Children are potent and photogenic symbols of need, inviting compassion and generosity from media audiences [30]. This kind of portrayal exemplifies the ‘Rule of Rescue’: a moral imperative to prioritise saving named, specific individuals facing avoidable death in situations that horrify onlookers and demand action, ahead of merely ‘statistical’ victims [31]. While these two exceptional children, now physically and emotionally proximal to Australians, were saved, the fate of countless, anonymous others in Bangladesh – a nation normally absent from Australian media coverage of LMIC health – was passed over in silence.

In none of the media coverage was there any discussion of whether Australians should support the girls’ medical care and rehabilitation: it was self-evidently a good thing to do. This contrasts
markedly with a prevailing, openly hostile and populist discourse often expressed in the domestic media about refugees and asylum-seekers, which emphasises the need for vigilance in protecting Australia's borders to prevent citizens of impoverished nations – including those with medical needs – seeking assistance [32]. Critically, children like Trishna and Krishna are exempt from such media treatment since caring Australians can be shown to be rescuing them, and skilful Australian medical personnel are able to perform ‘miracles’ on their problems.

The extent to which Australians cared about and donated funds to assist these two children was an index of ‘our’ circumstances [21] which compared favourably to those of Bangladesh. Indeed, this national element was explicitly brought to the fore on several occasions: following the surgery, Margaret Smith (CEO of the Children First Foundation) noted that the support they had received made her ‘feel very proud to be an Australian’; as the girls recovered, Moira Kelly spoke of ‘the power of love from all over the world, especially my own city of Melbourne’. Appeals of this kind are exemplary of what has been termed ‘banal nationalism’ [33] that exists in affluent countries and reminds citizens of who they, and their nation, are: compassionate, charitable, skilled and advanced. Apart from its major newsworthiness as a modern-day ‘freak’ story [13], the Australian news media coverage of Trishna and Krishna can be understood as enhancing the story’s relevance to a domestic audience. Ultimately, these concerns come together to ‘domesticate’ the story with events being framed within particular interpretive schema assumed to be shared by most in the national audience [34]. This is a response that ‘worked’ for both media producers and consumers, and ensures such stories are prominent.

Although one news report made explicit that there are ‘poor survival rates for the procedure in their native Bangladesh’, there was no further discussion of that nation’s medical system or health profile. The latest Demographic and Health Survey shows that, as in many LMICs, the major causes of childhood morbidity and mortality in Bangladesh are diarrhoeal diseases, acute respiratory infections and fever [35]. But these conditions are banal, not particularly photogenic and seem – in the popular imagination – to afflict such countries with wearying regularity. Further, their most effective treatment is prevention which requires slow, systemic change, the paradox of preventive success being when such diseases do not occur and provide no news hooks [36].

Might the extensive media coverage of cases like Trishna and Krishna’s have consequences for domestic thinking in Australia about LMIC health? Without their story Bangladesh, like many other LMICs [37] receives scant health news coverage, with an over-representation of stories on exotic diseases, disasters and dangers [10]. The massive coverage given to their story contrasts with the dearth of news consideration of more widespread causes of morbidity and mortality and risks distorting audiences’ sense of the leading health issues facing that nation.

The media presentation of Trishna and Krishna as rescued ‘innocents’ strengthens an existing, popular image of LMICs as themselves helpless. There are only four other, discrete narratives from Bangladesh in the AHNRC’s database, each of which confirms this notion: stories about a fatal factory fire, Burmese refugees in Bangladesh, a Bangladeshi-Australian surgeon correcting children’s facial deformities in his home country and an Australian-sponsored measles immunisation programme. Taken together, such presentations offer only the most cursory and partial treatment of health in a nation of 150 million people, and may reinforce the sense that this is a place in which disaster and misery are routine. Bangladeshis themselves are aware of this limiting external perception; indeed, many consider the success of indigenous non-government organisations formed expressly to tackle poverty – such as the 2006 Nobel Peace Prize-winning Grameen Bank and BRAC (formerly known as the Bangladesh Rural Advancement Committee,
and the world’s largest non-government organisation) – to have been in the vanguard of improving the country’s international image [38].

Two matters germane to the twins received no coverage in the 70 reports. First, no consideration was given to the girls’ capacity to lead meaningful or independent lives had either or both sustained neurological damage during the operation. Although iterations of their story usually mentioned the need for ongoing medical care, the possibility of negative outcomes was largely avoided, despite the serious potential consequences. This evasiveness is especially relevant in light of the observation that children with ‘ordinary’ disabilities have no real media presence [24]. Second, no stories mentioned whether the operation was being conducted entirely on the basis of private money, or whether it was in any way funded by the public purse. None of the coverage considered how the funds expended on this ‘heroic’ medical procedure might have been otherwise invested in other areas of health importance with lower profile [39].

A major part of the media focus in Trishna and Krishna’s story was upon Australia’s medical excellence, the corollary being that Bangladesh, by contrast, was hopeless and helpless. While this may be an accurate assessment in relation to highly-specialised surgery, Bangladesh has made enormous contributions to public health. On two occasions since it was first conferred in 2001, Bangladeshi organisations have been granted the Gates Award for Global Health in recognition of contributions to the improvement of health worldwide. The inaugural winner – the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) – was selected largely for its pivotal role in the development of oral rehydration therapy for diarrhoea [40]. Twenty-five years prior, this treatment was described as ‘potentially the most important medical advance this century’ [41]. Yet Australian television features no coverage about the ongoing evolution of this low-cost, life-saving remedy.

Once again, public health is the poor cousin of dramatic, downstream interventions [23] which, in turn, reinforces the popular perception of high-income nations’ absolute medical and cultural superiority. The urgent need in this case for such an intervention, and the ability of (Australian) tertiary medical care to respond, sidelines the more complex, long-term responses at which public health excels – and in which there are fewer appealing images or immediate solutions [20].

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References