

LETTERS

WhatsApp, Doc?

Confidentiality underpins the trust between doctors and patients. As far back as the 2nd century BC, the great Indian physician, Charak, had stated: "Nothing that happens in the house of the sick man must be told outside, nor must the patient's condition be told to anyone who might do harm by that knowledge to the patient or to another"(1).

There is a trend among doctors in India of sharing images of patients or the results of their investigations through WhatsApp chats. In a brief informal survey that I carried out in my medical school's WhatsApp group, in which 32 out of 69 participants responded, an overwhelming majority of the respondents (24/32; 75%) felt that sharing of data was acceptable as long as the data were not identifiable. Only one respondent stressed the importance of end-to-end encryption. A minority (4/32; 12.5%) was of the opinion that data should never be shared on WhatsApp, while the rest had no reservations about sharing of data even when they were identifiable (4/32; 12.5%).

Technological advancements, including WhatsApp-based communications, can facilitate clinical care (2, 3), but they also introduce new challenges in relation to the confidentiality of the patient. There is a possibility of breach of confidentiality. Also, one cannot ignore the risk associated with the transmission of sensitive data to external servers (4).

The indiscriminate sharing of data on mobiles, particularly on group chats, raises further challenges. Identifiable data might relate to individuals within a group, and the relatives of the members of a group may gain access to their mobile devices, or the devices may get lost or stolen, leading to accidental breaches of confidentiality.

Not all data are personally identifiable. A majority of the respondents in my survey felt that it was acceptable to share unidentifiable data. However, a combination of data may still identify patients even if the individual components of the data are not identifiable. In the traditional setting of print journals, even anonymous case reports describing a constellation of rare findings might reveal the identity of the patient from the authors' affiliation, which is an indicator of the geographical location. This has led some journals to make consent mandatory even if the reports are anonymised (5). The risk of breach of confidentiality may be greater in the case of sharing of unidentifiable data on WhatsApp chats than in that of accessing case reports in print journals because in the former, individuals must actively seek out information from the journal, whereas WhatsApp posts are unsolicited. Further, data can be unintentionally and accidentally posted in another group. As for identifiable data, indiscriminate sharing of these on smart phones should be considered a very serious breach of confidentiality. Any consent obtained from the patient must be comprehensive.

Doctors should be educated on the potential misuse of data when using mass communication tools. There should be adequate information governance oversight of the process. Smartphone devices could be offered in restricted settings within hospitals, strictly for institutional use, to facilitate the process of sharing data, speed up communication and make for more prompt consults, but these devices should not be made available for personal use.

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4D ultrasound imaging – ethically justifiable in India?

Four-dimensional (4D) ultrasound (real-time volume sonography), which has been used in the West since the last decade for the determination of gender as well as for bonding and entertainment of the parents, has become widely available in India in this decade. Here, I would like to discuss the ethical issues associated with 4D ultrasonography in India. These are self-referral, the use of the technology for non-medical indications, a higher possibility of the disclosure of the foetus' gender and safety concerns.

4D ultrasound or live 3D ultrasound is real-time depiction of the real lifelike foetal images produced by post-processing of grey-scale two-dimensional images (1). 4D imaging has a role to play in obstetric and gynaecological imaging, and has few other applications (barring telemedicine and education). In gynaecology, it is used for imaging of congenital uterine anomalies, the endometrial cavity, cornual ectopic pregnancy and adnexal lesions, among other things (2). In obstetrics, its uses include the assessment of foetal anomalies involving the face, brain, thorax, heart, spine and limbs (3).

In western countries, where prenatal gender determination is legal (unlike in India), 4D imaging technology is used for "Meet the Baby" ultrasound scans, which allow the parents and relatives to watch the intrauterine foetus in a comfortable family-theatre environment, under the premises of parental-foetal bonding and gender determination. Certain places

offer only 3D/4D ultrasound between 26 and 34 weeks, without offering a detailed anomaly scan. 4D ultrasound has permeated India rapidly and most ultrasound clinics offer it with enticing foetal images. Though there are no stand-alone centres offering the examinations, the existing scan centres have pounced on the “opportunity” to offer them, charging twice or thrice the amount charged for routine scans.

The most disconcerting aspect of the use of 4D ultrasound in India is the fact that it does not concur with the Pre-conception and Pre-natal Diagnostic Techniques (PCPNDT) Act. Though the 4D scan helps parents to better visualise anomalies such as cleft lip, club feet and spinal anomalies, most of the time it is offered to parents as a source of entertainment and enjoyment. That most patients coming for 4D ultrasound refer themselves and do not have a prescription is another contravention of the PCPNDT Act, as a prescription is a must for obstetric ultrasonography (4). Scan centres do not insist on prescriptions and further, entice patients who have come for routine ultrasound by displaying 4D foetal images.

The most serious issue is the high possibility that the foetus' gender may be revealed on large screens, either inadvertently or purposely – something which is criminal according to the PCPNDT Act and punishable with imprisonment and a fine (5). Mostly, patients opt for 4D ultrasonography so that they have a higher chance of identifying the gender of the foetus, especially when the entire family is focused on the screens.

4D imaging has been promoted as being as safe as a routine scan since it uses the same frequency and power as ultrasound. However, it cannot be disputed that 4D imaging takes more time than routine scanning and the risk-benefit ratio for increased acoustic exposure is unknown.

The radiologist, who is a consultant /employee in a scan centre, does not have the option to refuse 4D scans on the basis of

the two factors mentioned above, without risking his/her job. Hence, the consultant radiologist is subject to an ethical and professional dilemma. Some centres are owned by radiologists, who fear that not offering these examinations would reduce their competitiveness in the radiology “business”.

Hence, it would be ideal if the health ministry of the Government of India issued specific directives regarding the use of 3D/4D imaging. Even if the government restricts its use only for medical indications, it would be difficult to ascertain whether this is being done in practice. Till appropriate steps are taken, these 4D foetal “photo studios” and machine vendors will continue to flourish, with hapless radiologists not knowing exactly how to respond.

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Articles from *IJME*, as also from the journal's previous titles *Medical Ethics* (1993-5), and *Issues in Medical Ethics* (1996-2003) are indexed on Pubmed.