Communicu

Soft Skills Training

Different Tools to Communicate With Parents and Caregivers

Every hospital is different and may have different capabilities. Certain technologies may not be available at all institutions.

care

eHealth (short for Electronic Healthcare) is an interdisciplinary field that uses Information and Communication Technologies (ICT) to improve the efficiency, effectiveness, quality, and accessibility of healthcare services. This approach is based on digitization, process automation, rapid storage and management of clinical data, and the promotion of information sharing between the various players in the healthcare sector.[1]

In 2005, WHO formalized eHealth as the effective and safe use of ICT to support and improve health and healthcare, including the supply of healthcare services and continuous medical training.[2]

Among the main objectives of eHealth, first and foremost, is implementing accessibility to healthcare services through telemedicine and teleassistance, particularly in remote or less-served areas.[1] Implementing increasingly refined computerized systems allows the possibility of providing clinical information in real time, reducing medical errors and improving the diagnosis and management of diseases.[1] eHealth can overcome geographical barriers, allowing access to medical and specialized services, even in remote or underserved areas, through telemedicine and teleassistance. This improves access to healthcare services.[1] eHealth enables sophisticated improvements such as optimizing healthcare data management, reducing administrative costs, and streamlining healthcare activities.[3]

Since these aspects are closely linked to improvements in logistical, economic, and administrative terms, eHealth allows, on the parents' side, their empowerment through facilitated access to their children's medical data, telemonitoring, and the possibility of online training. Parents can be actively involved in managing their children's healthcare through online applications and tools that provide personalized information, remote monitoring, and educational resources.[1,2]

The best-known developments offered by eHealth include:
a. eHealth Records (EHRs), which allow the digitization of patient data;[4]

b. the use of videoconferences and other technologies for a remote medical consultancy that finds space in the field of telemedicine;[1]
c. mobile health applications that allow parents to monitor their newborn's health and healthcare professionals to communicate with parents.[1]

The aim is to provide more efficient, effective, and equitably accessible care globally.[2]

The events related to COVID-19 have highlighted how new tools are urgently needed for communication with parents whose children are hospitalized in the Neonatal Intensive Care Unit (NICU) to improve doctor-parent communication and to respond to the specific needs and expectations of families in the NICU.[5] Also, hospital policies, the severity of the newborn's condition, or parental health concerns may influence parents' presence in the NICU. Parental absence can negatively affect parents' mental health, their bond with their newborns, and their newborns' development. Efforts are being made to increase parental involvement in the NICU by implementing, for example, family-centered models of care and providing parent education and support.[6]

Current communication methods rely heavily on the staff's availability and ability to multitask, which can lead to communication errors. We saw in Learning Unit 1 how good communication between healthcare professionals and parents in the NICU is vital in facilitating the care process and how appropriate use of language and communication in the NICU is a crucial element to establishing a trusting relationship with parents.[7]

The literature has begun to highlight how the use of modern innovations in communication technology, such as high-quality communication systems and cloud-based video messaging services, has been perceived positively by parents and NICU staff.[8] Additionally, the incorporation of eHealth technologies, such as video chats and audio recordings, are helpful tools to help connect families with their newborns in the NICU, especially in situations where the possibility of face-to-face visits is limited (e.g., during the COVID-19 pandemic or when the child's condition is so critical that the parents cannot be present).[8]
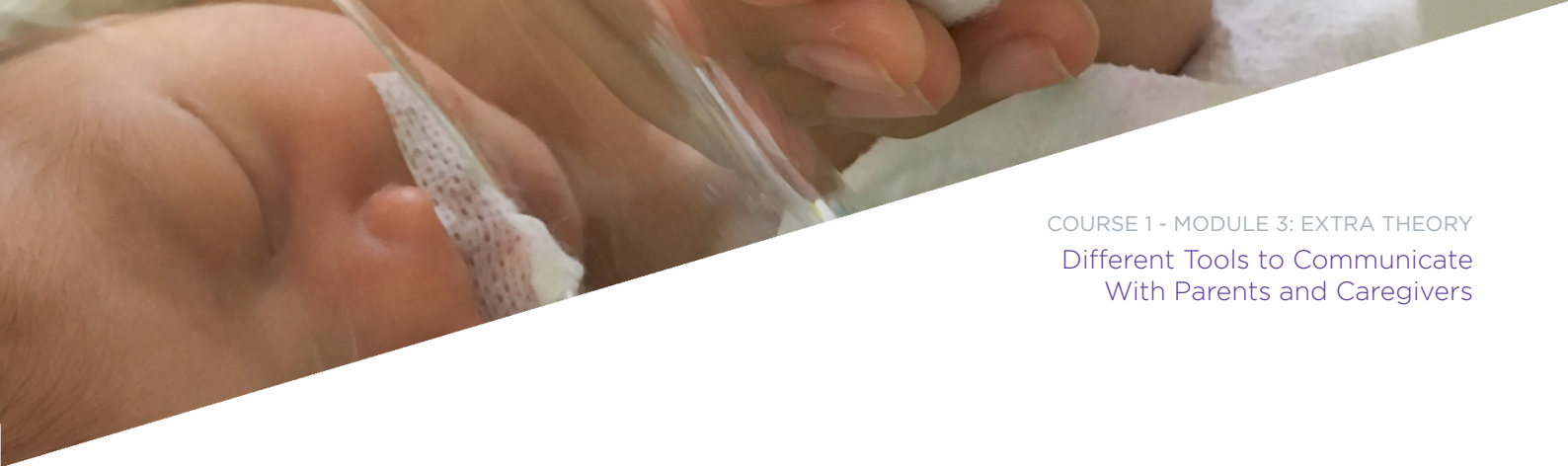
One of the technologies that can be used successfully in neonatal intensive care is the webcam.[6] Several studies have evaluated this technology's effects on the well-being of parents, recognizing the positive impact of webcams, especially in terms of facilitating communication with parents and the possibility of creating a bond with newborns.[6]

Consider, for example, the usefulness of this tool in the hours and days immediately following delivery, when the mother (who in most preterm deliveries has undergone an emergency C-section) is not yet able to leave her bed in the postpartum unit to reach the NICU. The webcam allows the mother to see her baby, feel reassured, and begin the bonding process that will help facilitate breastfeeding later.[9] The tool also proves to be very useful after the mother's discharge from a hospital that does not allow the parent to stay or when she cannot stay in the NICU (because she is COVID-positive, has other children at home, etc.). Implementing a webcam system ensures constant visual contact with the newborn and surroundings, which appears to reduce the volume and general necessity of parent calls. There has been a perceived increase in parental satisfaction due to reduced stress levels and better communication between parents and healthcare professionals fostered by new communication tools, such as communication via notes in the incubator.[6] Although some communications require personal and private conversations, webcams appear to help balance informational and interpersonal conversations, acting as a facilitation tool. However, webcams cannot satisfy all the requirements of communication and relationships, such as face-to-face meetings between healthcare professionals and parents.[6]

Videoconferencing tools in neonatal intensive care also have several advantages to facilitate communication between operators and parents.[6]

Video conferencing tools in the NICU may impact parents' overall well-being and involvement in their children's care. Several studies have emphasized the benefits of video messaging services and live-streaming cameras in the NICU. In addition to synchronous communications, asynchronous video messages can be recorded when healthcare staff and parents have scheduling conflicts (e.g., due to work commitments and management of other children). Video messaging services help parents feel closer to their infants and provide reassurance about their care. Benefits are also noted by healthcare staff, especially in building a good relationship with families. These tools also led to the improvement of the relationship between staff and parents.[6]

Cloud-based video messaging services help parents connect with and comfort their newborns.[6] The healthcare professionals who used this tool underscored how video (versus traditional phone contact) created greater trust and a better relationship with the parents, who also felt more involved in the process. These tools improve communication between parents and healthcare professionals, providing means for visual interaction, reassurance, and the perception of having better access to healthcare professionals.[6,8]

Both synchronous and asynchronous messaging via video conferencing do not require complex tools. A cell phone equipped with popular video calling applications may be sufficient. However, the videoconference tools allow for optimal communication of the NICU's daily routines (e.g., bathing, feeding, and weighing) while also providing reassurance about the infant's growth and health status.

Whenever possible, critical communications should be reserved for face-to-face meetings or, in exceptional circumstances (e.g., when parents cannot travel), for video conferences (but never via video message) to ensure parents understand the circumstances, and their concerns can be adequately addressed. Moreover, these communications should always happen in quiet areas to protect the family's privacy and avoid interruptions or potential distractions.[6] For critical communications, the co-presence of a neonatologist and a psychologist may help provide precise and correct clinical information and emotional support.[10]
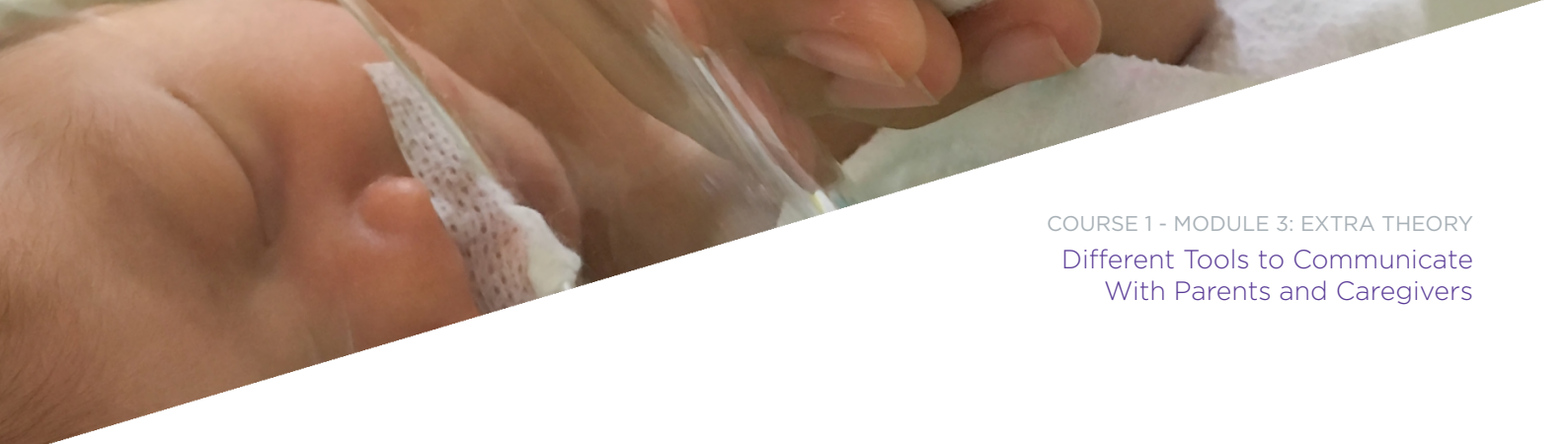
Based on clinical studies, other tools that have proven useful in helping parents stay informed about their baby's progress are specialized NICU communication apps, such as eHealth devices. Often, these apps are provided on a device by the hospital to assist families with tracking their baby's care and progression. Please note, not all hospitals or institutions may have access to this technology.[1]

These apps have several advantages:

1. **Improved communication:** Current communication methods in the NICU largely depend on the staff's ability to multitask, which can lead to errors and miscommunications. Specialized communication apps provide a high-quality communication system beyond traditional methods, allowing parents to receive accurate and timely updates on their child's progress.[1]

2. **A closer connection:** Apps where video messages from medical staff can be viewed in the cloud allow parents to receive updates and see their baby, even when they are not physically present in the NICU.[8]

3. **Post-discharge support:** These applications may provide support and information to parents, helping them manage their children's medical complexity and the psychological burden of caring for them. These applications can also provide updates on progress and educational, psychological, and social resources that can be useful to parents after discharge, potentially helping reduce emergency visits to the hospital.[1]

In summary, specialized NICU communication apps can provide parents with medically specific data to improve their understanding of their child's condition and their involvement in their child's care. Apps also can provide updates on progress, educational resources, and the facilitation of communication with healthcare

providers, helping them feel closer to their children and reassuring them about their care during their stay in the NICU and after discharge.[1]

Digital post-discharge monitoring is a new, highly technical aspect of modern healthcare practices and fits under the broader category of eHealth. This idea refers to the systematic collection, analysis, and evaluation of data relating to newborns' health and the psychophysical well-being of their parents during the potentially stressful time after returning home from the hospital. Such monitoring offers a thorough, real-time view of the parents' health, enabling more accurate management of medical conditions and personalized care. This allows for the identification of parents who may be particularly at risk of experiencing psychosocial challenges. The close relationship between the parents' well-being and the outcomes of their newborns' health is well-known from the literature on preterm infants.[1]

eHealth systems require significant investments and healthcare professional training. Implementing them can be challenging for healthcare systems that are already economically struggling. However, investing in eHealth can offer significant improvements for parents as well as NICUs. The automation of administrative processes and digital data management can reduce operating costs and improve the efficiency of the entire healthcare facility.[11]

The digital divide—understood as different access to technological resources depending on age, social, economic, and cultural status—can create critical disparities in terms of access to the Internet or digital technologies and, subsequently, access to eHealth.[12]

Still, within the digital divide, the reliability of digital technologies represents a crucial operating factor in terms of the effectiveness and efficiency of eHealth.
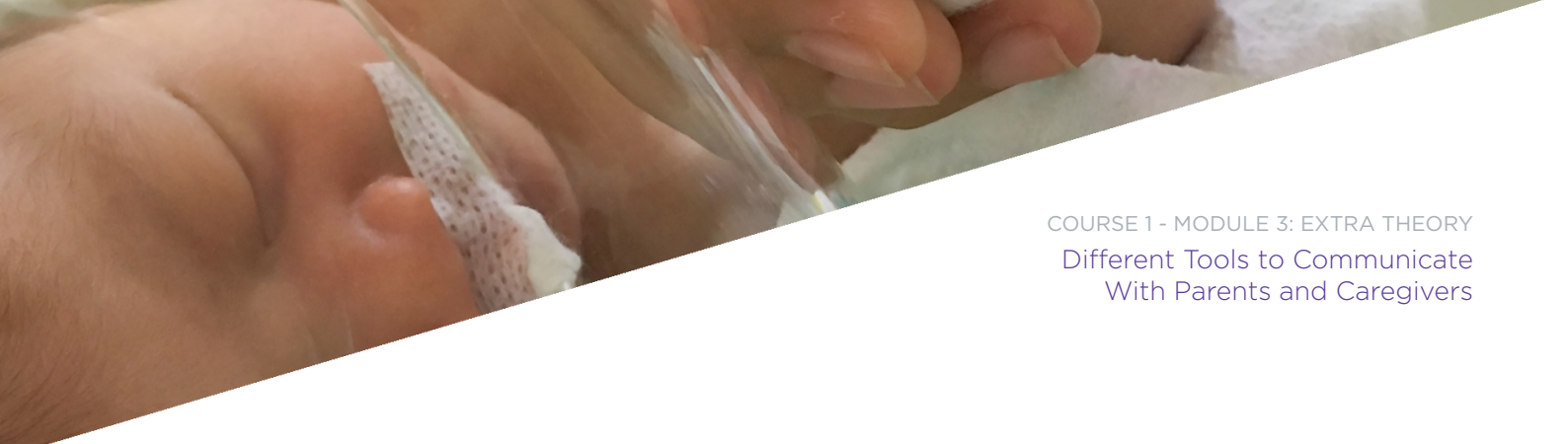
Hardware failures or service interruptions can significantly impact healthcare services, particularly as parents and healthcare systems shift from traditional face-to-face consultations to increased reliance on eHealth.[13]

The shift to online methods also drives improved information exchange between healthcare professionals and parents, ensuring greater confidentiality in dedicated, digital environments.

There is also an increased risk of violations and unauthorized access to sensitive NICU patient data online. For this reason, security and privacy are essential to eHealth practices and are governed by health system regulations. However, regulations and compliance with privacy laws differ by state, making health data management complex and access to it inconsistent for parents and caregivers.[13]

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