Makerere University and Columbia University (MUCU) are pleased to introduce you to the **FIRST** of our biannual adolescent newsletters! We are delighted that you have expressed an interest in the care of the adolescent patient. Each newsletter will explore a different issue facing adolescents in Uganda and the surrounding countries in East Africa.

**OUR MISSION** is to provide a forum to share member news, interesting program updates, clinical cases, and discuss the latest in “hot” adolescent topics.

**OUR FIRST ISSUE** is dedicated to adolescent pregnancy in Uganda.

**FUTURE TOPICS** will include: Contraception; Sexual Activity/Coercion/Violence; Taking a Psychosocial History; Managing the Confidential Visit: Parents and Teens.
Meet the Newsletter Editorial Board

Co-Editors in Chief:

**Sabrina Kitaka M.D.,** Senior Lecturer & Paediatric & Adolescent Health Specialist, Department of Paediatrics and Child Health, Makerere University College of Health and Sciences Kampala, Uganda. Dr. Kitaka is passionate about promoting adolescent health and medicine in East Africa. For the past 11 years, she has taught Adolescent Medicine at Makerere University College of Health Sciences. Since 2006 she has collaborated with Dr. Betsy Pfeffer and her colleagues at Columbia University and since 2010 they have conducted three annual in-service adolescent health workshops for East African health providers. She is the director of the Adolescent Program at the Paediatrics Infectious Diseases Clinic at the Mulago National Referral Hospital.

**Betsy Pfeffer, M.D.,** Assistant Professor of Pediatrics at Columbia University Medical Center and New York Presbyterian Hospital, New York, U.S.A. Dr. Pfeffer is an adolescent medicine clinician who sees teens in an outpatient and inpatient setting, teaches medical students and residents and lectures internationally on multiple topics related to adolescent health care. She has been working together with Dr. Kitaka for over six years and is committed to their efforts to help improve health care delivery to teens in Uganda.

Editorial Team Kampala, Uganda

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**NEWSLETTER SUBMISSIONS:** The next newsletter will focus on sexual activity in adolescents and will be published in Nov, 2013. SAHU members are encouraged to submit member news, program updates and interesting cases related to this newsletter topic with all patient identifiers removed. The editorial board will conduct a peer review process for all submissions. Submissions will be accepted from May 15th –June 30th, 2013. Please email all submissions to: sabrinakitaka@yahoo.co.uk

Thank you beforehand for your participation.
In the developing world, and in Uganda specifically, there is limited training for health care providers about how to care for the adolescent patient. There are also limited health care services designed specifically for this age group. For example, in Uganda there are few designated adolescent friendly outpatient health care facilities. Inpatient pediatric wards care for children up to age 12 years so adolescents are typically admitted to adult wards. Despite these limitations, there is a nationwide recognition that adolescents have special health care needs and that there is a dedicated group of Ugandan health care providers committed to improving the state of adolescent health care in Uganda. Young people 10-24 years of age now number more than 1.8 billion globally, making up 27% of the world’s population. Uganda has a total population of 33 million people, of whom more than 55% are less than 18 years. The population of adolescents continues to grow. Uganda has a very high birth cohort of 1 million per annum and a fertility rate of 6.2 per child-bearing woman. Despite the presence of tertiary and regional hospitals in the country, and the presence of well-regarded medical schools in Uganda, there has been an overwhelming neglect of adolescents in the health care system.

In the United States, the birth of Adolescent Medicine began with the vision of one man, J.R. Gallagher, a physician trained in internal medicine and cardiology, who had no formal training in adolescent medicine. During the great economic depression of the 1930’s, he found work as a school physician. He recognized that adolescents had their unique strengths and vulnerabilities and would benefit from having a doctor of their own. Dr. Gallagher went on to create the first adolescent clinic in 1951 at Boston Children’s Hospital, in the U.S. Sixty years later, multiple adolescent services and training programs exist throughout the country, highlighting how commitment can transform care.

We are confident that your commitment to improving the care of the adolescent patient is what will drive improved services in your location. Thank you for your ongoing participation and we look forward to hearing about member news, your programs, and interesting cases so we can share them in future newsletters.
Member News: SAHU

The Society of Adolescent Health in Uganda (SAHU), was launched in November 2012, following a regional training in Kampala, Uganda, that was led by experts from Columbia, and Makerere Universities and the Naguru Teenage Center. The purpose of SAHU is to improve adolescent medicine in Uganda by promoting research, training, clinical care and advocating for best practices. The goal is for SAHU to hold its first Annual Scientific Meeting at the end of 2013, in Kampala. STAY TUNED, an e-mail will be sent to SAHU members in Aug., 2013 with instructions about how to submit an abstract.

SAHU Executive Committee

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GOOD NEWS: SAHU membership will initially be FREE!

SAHU MEMBERSHIP:
You can join SAHU by sending an e-mail to: adolhealthuganda@gmail.com. Please include the following information in your e-mail:

- Name, surname, title
- Job title
  - Pediatrician
  - Internal Medicine
  - Obstetrician
  - Psychiatrist
  - Postgraduate Trainee
  - Medical Officer
  - Nurse
  - Social Worker
  - Community Health Worker
  - Other
- City, Country of work
- Your institution /affiliations
- Your e-mail address

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First Adolescent Clinic Opens at Mulago Hospital

The Makerere/Mulago Columbia Adolescent Clinic (MMCA) opened for patient care in May 2013.

The MMCA will address gaps in services by providing holistic adolescent health care for teens aged 10-19 years within the environs of a tertiary and university teaching hospital. It will also serve as a teaching resource and practical skills training site for undergraduate and post-graduate students at the Makerere University College of Health and Sciences, and visiting students.

Services are comprehensive and include:

- Psychosocial counseling
- School health assessment
- STI screening & treatment
- Sexual & reproductive health services including contraception
- Treatment of chronic diseases
- Immunization updates.

The MMCA’s aims are to improve healthcare for adolescents in the Kampala area and to serve as a model for future adolescent clinics in Uganda and East Africa.

Its mission is to serve as a “medical home” for adolescents; a place where they can be confidentially evaluated, treated and guided through their transition into adulthood.

The MMCA is accepting both walk-in adolescent clients and referrals. Standard referral procedures should be followed.

Clinic hours: Fridays 8:30AM-12:30PM

Location: Ward 15, Upper Mulago next to Jeliffe Ward

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Young people are our future—the future workers, parents and leaders of our nations. Yet over the last 50 years, global, social, economic and political changes have adversely affected young people’s health, to the extent that adolescence and young adulthood are no longer the healthiest time of life.
Patient L.M.’s history:

L.M. was 7 years old when she was admitted to school. She was a good student who attended school daily, studied hard and showed promise. At the age of 12, she expressed the desire to stay in school and ultimately go to a University, aspirations which her mother supported. However, because of multiple problems at home, L.M. dropped out of school when she was 13 years old. When L.M. was 14, she became very ill with a persistent headache. She was thought to have meningitis and was referred to Mulago, an urban teaching hospital in Kampala. L.M. was found to have Cryptococcal meningitis. She was treated with IV antifungal medication and ultimately recovered. While in the hospital she was found to be HIV positive. Her care was transferred to the Paediatrics Infectious Disease Clinic where she was started on anti-retroviral therapy (ART). On a follow up visit, when she was 14, she disclosed that her period was late and she was found to be pregnant. She and her boyfriend had been sexually active for over one year and never used condoms or other forms of birth control. She did not bring her 17-year old boyfriend to the clinic for counseling but she stated that her boyfriend was excited about the news. When her mother found out that she was pregnant she banished her from their home. L.M. moved in with her boyfriend who was working as a mechanic. She gave birth to an HIV-negative daughter.

Follow-Up:
When L.M. was 16, her adherence to treatment became erratic. She was lost to follow-up and missed her ART, and reproductive health appointments. She remained involved with the same boyfriend, became pregnant again and reconnected to care. ART was re-started. Her pregnancy was difficult, complicated by repeated attacks of malaria, pneumonia and persistent diarrhea. Before the birth of her child, her boyfriend died from AIDS. Her son was born at 36 weeks, and sadly was found to be HIV-positive at 6 weeks of life. L.M. is an HIV-positive 18 year old female who is a single mother of two small children, the youngest of whom is also HIV-positive.

If L.M. had access to adolescent specific services how might have things turned out differently?

At age 15, L.M. presents to YOU for care:

What are some things you would want to ask her?

How might you help her?
Case Discussion
Dr. Betsy Pfeffer

CASE DISCUSSION:

We often see adolescent patients similar to L.M. who deserve adolescent specific care, the goal of which is to optimize the chance of favorable outcomes. For our first visit with L.M., it would be useful to determine our immediate and future goals, and to allow time during the visit to answer L.M.’s questions and address her concerns.

Immediate visit goals:
Is she using contraception?
If L.M. is presently sexually active and interested in birth control, educating her about contraceptive choices, helping her decide on a method and informing her about how to access it would be useful. It might be worthwhile discussing whether she has other sexual partners and the risk of her transmitting to them, depending on her choice of type of protection/contraception.

Is she taking her antiretroviral medication?
If she is unable to take her medication as prescribed, what makes it possible for her to take them sometimes and not others? Outlining obstacles, capturing what works, and attempting to build on it might help increase her compliance. A scheduled follow up visit to review the outcome could be beneficial. Since you are a referral service and this patient in particular is receiving HIV care somewhere, you might want to discuss coordination of care with other involved health care providers.

Is she safe?
Where is she living? What is she doing for money? Is she in an unsafe environment?

How is her mood?
How is she managing with her baby? Does she show any signs of depression: feelings of hopelessness; loss of appetite; absence of energy; trouble falling asleep; inability to feel pleasure from activities usually found enjoyable (anhedonia); poor self-esteem; decreased concentration; thoughts of self-injury? If needed, are there resources and support systems available to her?

Future goals:
Does she plan to go back to school? What are her aspirations?
L.M. was a good student with hopes of achieving higher education. If she still wants to go back to school, is that realistic? Some advice or details on obstacles, how to overcoming them and helping with a plan might be helpful.

If adolescent specific care had been available to L.M., her chances for a better outcome might have been improved.

World Health Organization

“The whole health care system needs to be made more responsive to the special needs of adolescents...Special approaches or models are needed to ensure that the social and cultural circumstances around adolescent pregnancy and the special biological and physiological vulnerabilities of adolescents are addressed and access to services improved.”
**FACTS:**

**Repeat pregnancy:**
Many adolescents become pregnant again within a year after giving birth (1).
Educating L.M. about the inherent health risks of adolescent pregnancy could be helpful. Since her first pregnancy was successful, she might assume future pregnancies are without risk. She may not be aware that an adolescent who gives birth before age 16 poses a much higher health risk to herself and her baby compared to a women who gives birth in her 20’s (2). Some of the medical risks include an increase in: maternal death; neonatal death; delivery of a stillborn, low birth weight or small for gestational age infant; preterm delivery (defined as giving birth before 37 completed weeks of pregnancy); congenital malformations (2, 3).

**Medication adherence:**
Psychological distress and self- efficacy, defined as an individual’s confidence in their ability to take their medication, have been shown to be associated with medication adherence in HIV positive youth (4). Other possible explanations for failure of medication compliance in adolescents include poorer pharmacy refill adherence compared to adults and lack of social support (5).

**Safety:**
Assessing for safety is important to include during all adolescent visits. If a patient is found to be in an unsafe situation putting plans into place to assure safety is necessary. If available, a sexual/physical abuse referral to the child protection unit would be advised.

**Mood state:**
Adolescent mothers may be at risk of greater rates of depression compared to older mothers. One thought as to why adolescent mothers have a greater risk of depression is that the teens tend to be less psychologically prepared for pregnancy and this may trigger depression (2). This not only affects the individual but potentially may comprise the care of the infant.

**Education:**
Many societies do not allow adolescent girls who become pregnant to stay in school. Because of advocacy for the rights of female adolescents in Uganda, adolescent mothers recently have been allowed to return to school after delivery (6). As noted by the World Health Organization (WHO), supporting education for teen mothers is desirable and overall it is beneficial to both the mother and the baby by providing social, economic, and health benefits to both.

**REFLECTION:**
Teenage pregnancy remains a recalcitrant problem in Uganda. For change to occur, the first thing that needs to happen is that the problem needs to be uncovered and acknowledged. Once this occurs, providers can begin to confidentially dialogue with their adolescent patients so as to determine the risk profile of each patient seen. As providers, we may be the first to learn about confidential adolescent issues and it is imperative that we are well versed on how to best counsel and support our patients. Additionally, it is important to know available services so, if necessary, appropriate referrals can then be made. Providers can also group together and begin to create new programs and advocacy groups that address the unmet needs of their adolescent population.
Though fertility rates in developing regions worldwide have continuously declined, Sub-Saharan Africa continues to have the fastest population growth and one of the highest fertility rates worldwide (number of births per woman)(7,8). In Uganda, the incidence of teenage pregnancy was 24% in 2011 and although there has been a decline from the 31% observed in the 2000-2001 Uganda still has one of the highest rates of teenage pregnancy among sub-Saharan countries (9, 10). This is partly linked to early marriage and cohabitation as well as early onset of sexual activity (11). According to the 2011 Uganda Demographic Health Survey (UDHS), of those aged 15-19 years, 8.6% of females and 0.6% of males are married and 11.4% of females and 1.2% of males are living together (3). Married females have more unprotected intercourse and have sex more frequently than their unmarried age mates (12). Between the years 2000-2009, 35% of women aged 20-24 gave birth before age 18 years (13). Many of the pregnancies in female adolescents aged 15-19 years are neither desired nor planned. The 2011 UDHS reports that 40% of adolescents under the age of 20 years who had a child five years prior to the survey did not want to have a child at that time. The WHO analysis of survey data from 51 developing countries from the mid-1990s to the early 2000s shows that almost 10% of girls were mothers by age 16, with the highest rates in sub-Saharan Africa and South-Central and South-Eastern Asia (14). Adolescents in rural Uganda become parents sooner than their urban counterparts (24% versus 21% respectively) as do adolescents with no education compared to girls with secondary school education (45% versus 16% respectively) (3). Adolescent pregnancy entails increased health risks of early childbearing to both mother and child. Adolescents 16 years or younger face four times the risk of maternal death compared to women older than 20 years, and the rate of neonatal death is about 50% higher (14). Additionally, pregnancy can interrupt education. Of females aged 12-19 years who dropped out of school, 10% identified pregnancy as the cause (15). Almost all unsafe abortions occur in the developing world and adolescents aged 15-19 years account for 25% of all unsafe abortions in Africa (16). Currently, abortion is illegal in Uganda except under exceptional circumstances that include saving the life of the woman, or preserving her physical and mental health (17). Unwanted and unplanned pregnancies in adolescents coupled with the high teenage pregnancy rates contribute to the high incidence of abortion. Although abortion is illegal, between 15-23% of Ugandan females aged 15-24 years who have been pregnant have had an abortion and Ugandan adolescents represent 25-33% of females hospitalized for abortion complications (18, 19). In Mulago hospital in Kampala, Uganda, almost 50% of the women who died from abortion complications were adolescents (20). Additionally, adolescents tend to seek abortion later than their older peers and are more likely to use unskilled providers.
Useful Adolescent Websites

American Social Health Association: http://ashastd.org/
Advocates for Youth: http://advocatesforyouth.org/
YMC: Young Men’s Clinic: http://www.youngmensclinic.org/
Center for Young Women’s Health, Children’s Hospital Boston: http://youngwomenshealth.org/
Go Ask Alice: http://goaskalice.columbia.edu/
Guttmacher Institute: http://guttmacher.org/
WHO: Sexual and Reproductive Health: http://who.int/reproductivehealth/en/
WHO: Sexually Transmitted Infections: http://who.int/topics/sexually_transmitted_infections/en/

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